JANUARY 1991

AIR QUALITY SOLID WASTE ASSESSMENT TEST REPORT

NAVAL AIR STATION ALAMEDA
ALAMEDA, CALIFORNIA

DEPARTMENT OF THE NAVY
WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA 94066-0727

AIR QUALITY SOLID WASTE ASSESSMENT TEST NAVAL AIR STATION ALAMEDA ALAMEDA, CALIFORNIA

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Transmittal
Air Quality Solid Waste Assessment Test
Naval Air Station Alameda
Alameda, California

Dear Ms. Dizon:

Enclosed are twenty copies of the Final Air Quality Solid Waste Assessment Test report performed at Naval Air Station Alameda. This transmittal fulfills the requirements for Delivery Order No. 0007 under Contract No. N62474-85-D-5620.

Very truly yours,

James W. Babcock, Ph.D.
Project Manager

JWB/rr

Enclosure

cc: T. Bodkin, Canonie Environmental Services Corp.

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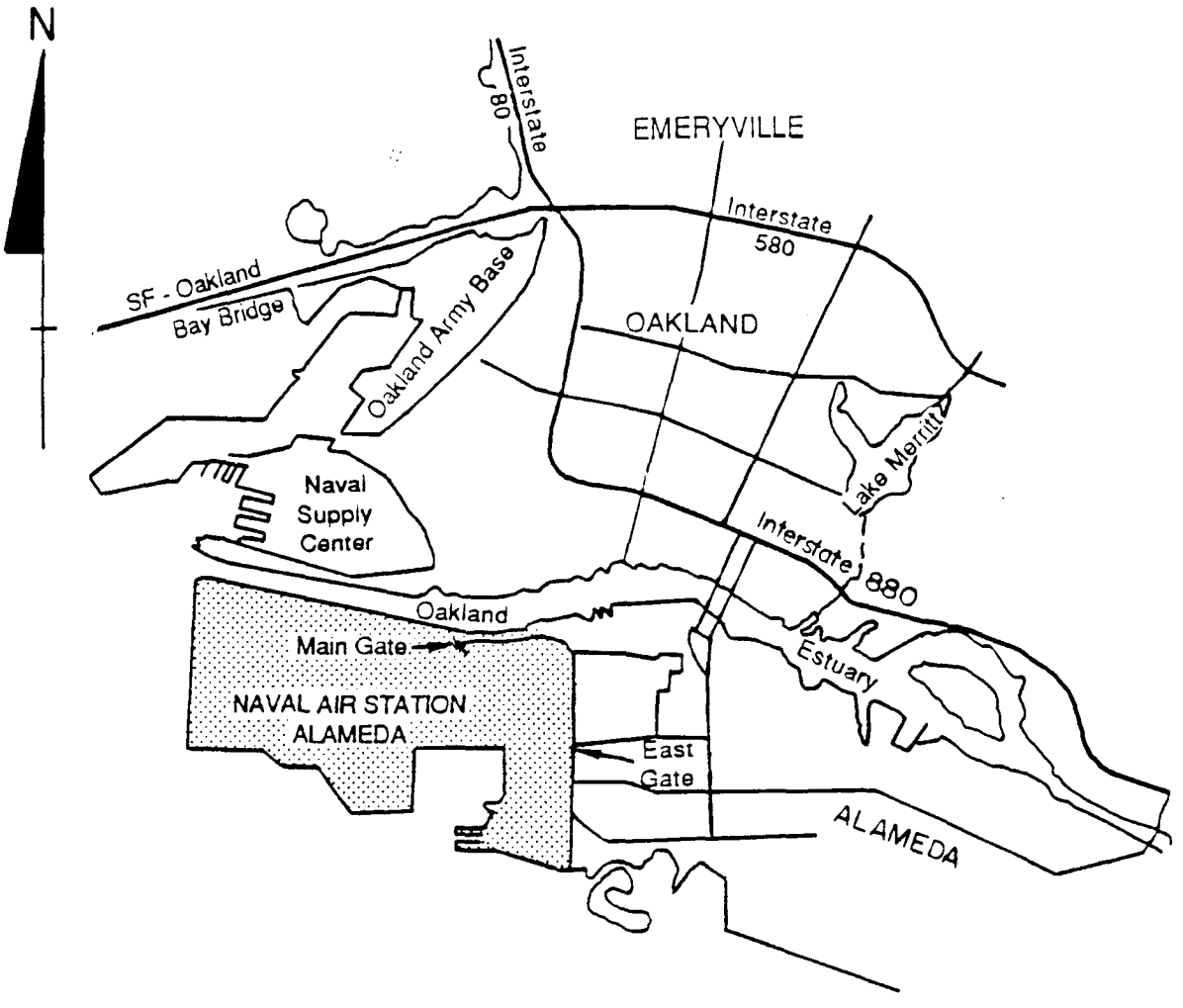
SECTION 1.0

INTRODUCTION

This Air Quality Solid Waste Assessment Test (Air SWAT) Report has been prepared for the West Beach Landfill and the 1943 to 1956 Disposal Area at the Naval Air Station Alameda in Alameda, California (NAS-Alameda). Specifically, this report describes and presents the results of the activities conducted at these sites to comply with California Health & Safety Code 41805.5 (HSC 41805.5).

Prior to performing the Air SWAT, the Department of the Navy, Western Division, Naval Facilities Engineering Command (Navy) participated in discussions with the Bay Area Air Quality Management District (BAAQMD) regarding HSC 41805.5. During the course of these discussions the BAAQMD indicated that for the purposes of the Air SWAT, the West Beach Landfill and the 1943 to 1956 Disposal Area were to be considered as one site and that the testing requirements were to be the same as those for hazardous waste sites. As a result of these discussions a single Air SWAT Monitoring Plan (SCS, 1989) describing the proposed Air SWAT program was prepared for both sites. This plan was submitted to and approved by the BAAQMD before initiation of testing activities.

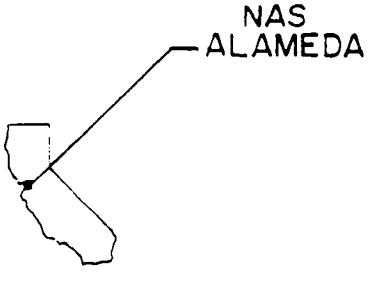
All field and laboratory activities conducted during the Air SWAT were performed in accordance with the State of California Air Resources Board (ARB) "Hazardous Waste Disposal Site Testing Guidelines" (ARB, 1987) and the BAAQMD approved monitoring plan (SCS, 1989). Site histories and background are described in detail in the Air SWAT monitoring plan. A site location map is presented on Figure 1-1.



SITE LOCATION

SCALE

6000 0 6000 FEET



SITE VICINITY PLAN
NAVAL AIR STATION
ALAMEDA, CALIFORNIA

PREPARED FOR
WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SCS ENGINEERS

SOURCE: CANONIE ENVIRONMENTAL SERVICES CORP.

REVISIONS	NO.	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
			CRE 9.22.89	Smith 9/22	Smith 9/22	

DATE: 9/22/89 | SCALE: AS SHOWN | **FIGURE 1-1**

Figure 1-1. Site Map

SECTION 2.0

ASSESSMENT METHODOLOGY

The Air SWAT was performed at the NAS-Alameda sites in June and July 1990. All sampling equipment and sample storage containers were constructed of chemically inert materials to prevent sample contamination. All samples were protected from sunlight to prevent possible photochemical reactions and were analyzed within 72 hours. All sampling and analytical methodology conformed with criteria established in the Guidelines (ARB, 1987) and described in the BAAQMD approved Monitoring Plan (SCS, 1989).

The Air SWAT monitoring activities conducted at the NAS-Alameda sites are described in the following subsections.

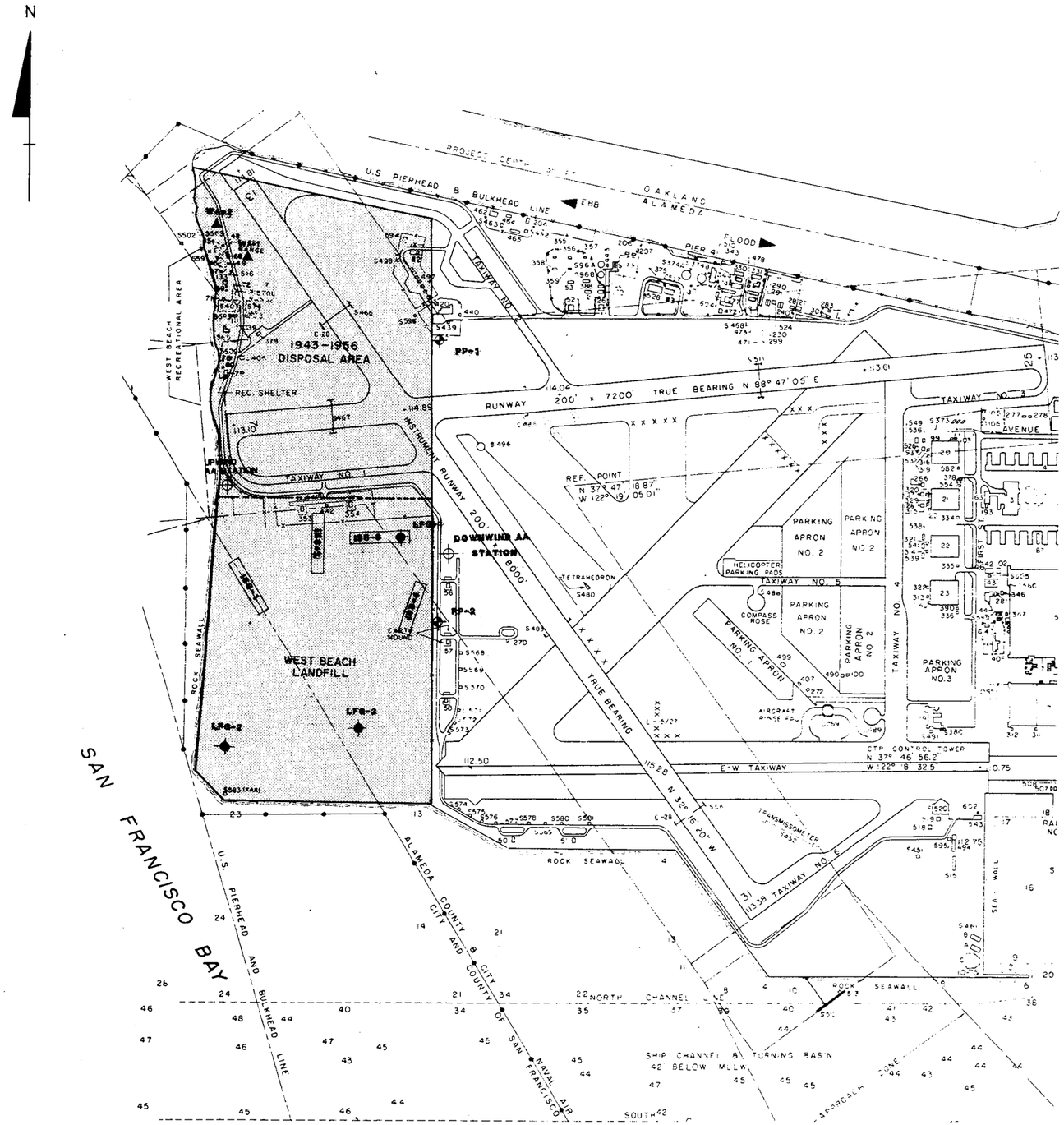
2.1 INTERNAL GAS CHARACTERIZATION

Five LFG samples were collected to measure the composition of the gas streams within the sites. Two samples were collected from existing wells (WA-1 and WA-2) and three samples were collected from probes installed by SCS on June 22, 1990. In the monitoring plan, wells WA-2 and 11 GW were originally designated as the existing wells to be used for LFG characterization. Once field activities began it became evident that well 11 GW no longer existed. Upon consultation with BAAQMD staff well WA-1 was selected to replace well 11 GW in the sampling program. LFG sampling well and probe locations are shown on Figure 2-1. LFG samples were collected from well WA-1 on June 26, 1990 and from well WA-2 and the probes on July 3, 1990. Prior to sampling each well or probe was purged of at least two well or probe volumes of LFG. A sample was then withdrawn into a 10-liter Tedlar bag enclosed in a light sealed box. The samples were transported along with a field blank to the laboratory via chain-of-custody procedures where they were analyzed for concentrations of methane, carbon dioxide, nitrogen, oxygen, and the 10 specified air contaminants (SACs) listed in Attachment 1 of the Guidelines (ARB, 1987).

2.2 INTEGRATED SURFACE SAMPLING

On June 25, 1990 integrated surface samples were collected immediately above four separate 50,000 square foot grids laid out on the landfill's surface. Grid locations are shown on Figure 2-1. These grid locations were chosen by the BAAQMD. The samples were collected 3 inches above the ground surface along the standard sampling pattern recommended in the ARB Guidelines. The samples were pumped into 10-liter Tedlar bags enclosed in light sealed boxes.

The samples were transported along with a field blank to the laboratory via chain-of-custody procedures where they were analyzed for concentrations of methane and the 10 SACs. During the sampling periods, wind speed and direction were continuously recorded to verify that the meteorological conditions set forth in the ARB Guidelines were met.



REFERENCE:
U.S. NAVY MAP

LEGEND:

- EXISTING WELL (WAHLER, 1985)
- LFG SAMPLING PROBE
- AMBIENT AIR MONITORING STATION
- LANDFILL PERIMETER MONITORING PROBE
- ISS INTEGRATED SURFACE SAMPLING GRID

SCALE
500 0 500 1,000 FEET

SITE LOCATION AND MONITORING POINTS PLAN
WEST BEACH LANDFILL AND THE 1943 to 1956 DISPOSAL AREA
NAVAL AIR STATION

ALAMEDA, CALIFORNIA

PREPARED FOR

WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA

BY

SCS ENGINEERS

SOURCE: CANONIE ENVIRONMENTAL SERVICES CORP.

DATE: 9/22/89	FIGURE 2-1	DRAWING NUMBER
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2.3 AMBIENT AIR MONITORING

Ambient air monitoring was conducted up and downwind of the sites from June 20, 1990 to July 3, 1990. A total of 47 (20 upwind and 27 downwind) samples were collected over 10 separate 24-hour sampling periods. Two samples, one upwind and one downwind, were collected each day with controlled samplers programmed to collect ambient air samples only when wind direction was within the desired sampling sector. Ambient air sampling locations are shown on Figure 2-1. All samples were pumped into 10-liter Tedlar bags enclosed in light sealed boxes. The samples were transported daily, along with a field blank to the laboratory where they were analyzed for concentrations of the 10 SACs. During the sampling periods, wind speed and direction were continuously recorded to verify that the meteorological conditions set forth in the ARB Guidelines were met.

2.4 LANDFILL GAS MIGRATION MONITORING

On June 22, 1990 two landfill perimeter monitoring probes were installed at the eastern perimeter of the NAS-Alameda sites at the locations indicated on Figure 2-1. These locations were chosen by the BAAQMD. Soil gas samples were collected from the probes on July 3, 1990. Prior to sampling each probe was purged of at least two probe volumes of soil gas. A sample was then withdrawn into a 10-liter Tedlar bag enclosed in a light sealed box. The samples were transported along with a field blank to the laboratory via chain-of-custody procedures where they were analyzed for concentrations of methane, carbon dioxide, nitrogen, oxygen and the 10 SACs.

SECTION 3.0

ASSESSMENT RESULTS

The results of the Air SWAT are presented in the following subsections.

3.1 INTERNAL GAS CHARACTERIZATION

Analysis of the internal LFG samples indicate that very little LFG is still being generated within the NAS-Alameda sites. All of the samples collected consisted mainly of nitrogen and oxygen, the primary components of air. A small amount of methane (3 %) was detected in the sample collected from probe LFG-1, indicating that some minor LFG generation may be taking place in that area of the site. Trace quantities of two of the SACs were observed in the sample collected from well WA-2; trichloroethylene at a concentration of 39 parts per billion, by volume (ppb) and trichloromethane at a concentration of 9.4 ppb. No SACs were detected in any of the other internal gas characterization samples. The apparent low LFG generation rate is consistent with that typical for landfills of the age and moisture content of the NAS-Alameda sites.

Internal gas characterization data are presented in Table 3-1. Laboratory analytical reports are presented in Appendix A.

3.2 INTEGRATED SURFACE SAMPLING

No methane was detected in any of the four integrated surface samples. Only two of the SACs were observed, both in trace concentrations. Tetrachloromethane was observed at a concentration of 0.2 ppb (the detection limit) in integrated surface sample ISS-2, and dichloromethane was observed at a concentration of 1.2 ppb in integrated surface sample ISS-3. Neither of these SACs were detected in any of the internal gas characterization samples.

Integrated surface sampling data are presented in Table 3-2. Field data sheets and laboratory analytical reports are presented in Appendix B.

3.3 AMBIENT AIR MONITORING

Of the 10 SACs, three were observed in the ambient air samples. Dichloromethane was detected at concentrations ranging from 1.1 to 4.2 ppb in samples collected during five of the 10 sampling periods. Tetrachloroethene was detected at concentrations ranging from the detection limit of 0.2 ppb to 0.7 ppb during eight sampling periods. 1,1,1-Trichloroethane was detected at concentrations ranging from the detection limit of 0.5 ppb to 3.3 ppb during seven sampling periods. All three SACs were observed in both upwind and downwind samples at roughly equivalent concentrations. There is no discernable emission pattern for any of the three detected SACs in the collected data. None of the SACs detected in the ambient air samples were observed in any of the internal gas characterization samples.

TABLE 3-1. INTERNAL GAS CHARACTERIZATION DATA

Well	WA-1	WA-2	LFG-1	LFG-2	LFG-3	Field Blank	
Date	6/26/90	7/3/90	7/3/90	7/3/90	7/3/90	7/3/90	
Sample Number	WA1-26	WA2-3	LFG-1	LFG-2	LFG-3	(2)6A & 6B	
Constituent	Detection Limit (ppb)*	Concentration (ppb)					
Chloroethene	500	ND	ND	ND	ND	ND	ND	ND
Benzene	500	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	1	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	ND	ND	ND	ND	ND	ND	ND
Dichloromethane	60	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	10	ND	ND	ND	ND	ND	ND	ND
Tetrachloromethane	5	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	10	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	10	ND	39	ND	ND	ND	ND	ND
Trichloromethane	2	ND	9.4	ND	ND	ND	ND	ND
Constituent	Detection Limit (%)**	Concentration (%)						
Oxygen	0.5	21	16	5.5	19	21	0.5	0.6
Nitrogen	0.5	79	79	70.4	78	79	1.2	0.7
Carbon Monoxide	0.5	ND	ND	ND	ND	ND	ND	ND
Carbon Dioxide	0.5	ND	4.4	15	1.3	0.2	ND	ND
Methane	0.5	ND	ND	3.0	ND	ND	ND	ND

ND = Not detected
* Parts per billion, by volume
** Percent, by volume

TABLE 3-2. INTEGRATED SURFACE SAMPLING DATA

Date:	June 25, 1990				
Sample Grid	ISS 1	ISS 2	ISS 3	ISS 4	Field Blank
Sample Time	0830 to 0900	0630 to 0700	0715 to 0745	0750 to 0820	N/A
Wind Speed Range (mph)	0 to 5	0 to 5	0 to 5	0 to 5	N/A

Constituent	Detection Limit (ppb)*	Concentration (ppb)				
Chloroethene	2.0	ND	ND	ND	ND	ND
Benzene	2.0	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.5	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.2	ND	ND	ND	ND	ND
Dichloromethane	1.0	ND	ND	1.2	ND	ND
Tetrachloroethene	0.2	ND	0.2	ND	ND	ND
Tetrachloromethane	0.2	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	ND	ND	ND	ND	ND
Trichloroethylene	0.6	ND	ND	ND	ND	ND
Trichloromethane	0.8	ND	ND	ND	ND	ND

Constituent	Detection Limit (%)**	Concentration (%)				
Methane	0.5	ND	ND	ND	ND	ND

ND = Not detected
* Parts per billion, by volume
** Percent, by volume

Ambient air monitoring data are presented in Table 3-3. Field data sheets and laboratory analytical reports are presented in Appendix C. Wind speed and wind direction data are presented in Appendix D.

3.4 LANDFILL GAS MIGRATION MONITORING

Both of the soil gas samples collected from the two landfill perimeter monitoring probes consisted mainly of nitrogen and oxygen, the primary components of air. No methane was detected in either of the soil gas samples. A trace quantity (4.9 ppb) of trichloromethane was observed in the soil gas sample collected from probe PP-2. Trichloromethane was detected in the internal LFG sample collected from well WA-2 at a concentration of 9.4 ppb. No other SACs were observed in either soil gas sample.

Landfill gas migration monitoring data are presented in Table 3-4. Laboratory analytical reports are presented in Appendix E.

TABLE 3-3. AMBIENT AIR MONITORING DATA

Date	June 20 to June 21					June 21 to June 22					June 23 to June 24				
Wind Speed Range (miles per hour)	2.5 to 20					5.5 to 20					2 to 18				
Prevailing Wind Direction	West Northwest					West Southwest To West Northwest					West Southwest To North Northwest				
Sampler Location	Upwind		Downwind			Upwind		Downwind			Upwind		Downwind		
Sampler Type	24 Hour	Controlled	24 Hour	Controlled	Co-lo cated[3]	24 Hour	Controlled	24 Hour	Controlled	Co-lo cated[3]	24 Hour	Controlled	24 Hour	Controlled	Co-lo cated[3]
Sample Number	2A-21	4A-21	1A-21	3B-21	-	2A-22	4B-22	1A-22	3B-22	-	2A-24	4A-24	1A-24	3A-24	-
Sample Time	0800	0800	0800	0800	-	0800	0800	0800	0800	-	1500	1500	1500	1500	-
Start/Stop	0800	0800	0800	0800	-	0800	0800	0800	0800	-	1500	1500	1500	1500	-
Constituent	Detection Limit (ppb)[1]	Concentration (ppb, by volume)													
Chloroethene	2	ND[2]	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
Benzene	2	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
1,2-Dibromoethane	0.5	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
1,2-Dichloroethane	0.2	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
Dichloromethane	1	ND	ND	ND	ND	-	ND	ND	2.5	ND	-	ND	ND	ND	ND	-
Tetrachloroethene	0.2	ND	ND	0.2	ND	-	ND	ND	0.2	0.2	-	ND	ND	ND	ND	-
Tetrachloromethane	0.2	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
1,1,1-Trichloroethane	0.5	ND	ND	ND	ND	-	ND	ND	3.3	ND	-	ND	ND	ND	ND	-
Trichloroethylene	0.6	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-
Trichloromethane	0.8	ND	ND	ND	ND	-	ND	ND	ND	ND	-	ND	ND	ND	ND	-

(1) Parts per billion
(2) None detected
(3) No co-located sample taken

TABLE 3-3. CONTINUED

Date		June 24 to June 25				June 25 to June 26					June 26 to June 27				
Wind Speed Range (miles per hour)		3 to 19				2 to 12.5					2 to 19				
Prevailing Wind Direction		West To West Southwest				West Southwest To West Northwest					West Southwest To West				
Sampler Location		Upwind		Downwind		Upwind		Downwind			Upwind		Downwind		
Sampler Type		24 Hour	Controlled	24 Hour	Controlled	Co-located	24 Hour	Controlled	24 Hour	Controlled	Co-located	24 Hour	Controlled	24 Hour	Controlled	Co-located
Sample Number		-	4B-25	1A-25	3A-25	1B-25	2B-26	4A-26	1A-26	3A-26	1B-26	2B-27	4A-27	1A-27	3A-27	1B-27
Sample Time		-	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Start/Stop		-	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Constituent	Detection Limit (ppb)[1]	Concentration (ppb, by volume)														
Chloroethene	2	-	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane	1	-	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.2	-	ND	ND	ND	ND	0.3	0.4	0.3	0.3	0.4	0.7	0.7	0.5	0.4	0.7
Tetrachloromethane	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	-	ND	ND	ND	ND	ND	0.9	3.3	ND	ND	ND	0.5	0.5	0.5	0.5
Trichloroethylene	0.6	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloromethane	0.8	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

(1) Parts per billion
(2) None detected
(3) This sample bag was empty upon arrival at the laboratory

TABLE 3-3. CONTINUED

Date	June 29 to June 30					June 30 to July 1					July 1 to July 2				
Wind Speed Range (miles per hour)	1.5 to 18					1.5 to 15.5					2 to 17				
Prevailing Wind Direction	West Southwest					West Southwest					West Southwest				
Sampler Location	Upwind		Downwind			Upwind		Downwind			Upwind		Downwind		
Sampler Type	24 Hour	Controlled	24 Hour	Controlled	Co-located	24 Hour	Controlled	24 Hour	Controlled	Co-located	24 Hour	Controlled	24 Hour	Controlled	Co-located
Sample Number	2B-30	4A-30	1A-30	3A-30	1B-30	2B-1	4A-1	1A-1	3A-1	1B-1	2B-2	4A-2	1A-2	3A-2	1B-2
Sample Time	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800
Start/Stop	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800	0800
Constituent	Detection Limit (ppb)[1]	Concentration (ppb, by volume)														
Chloroethene	2	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane	1	ND	1.1	ND	ND	ND	ND	ND	ND	2.7	ND	4.2	ND	1.3	ND	ND
Tetrachloroethene	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	ND	ND	ND	ND
Tetrachloromethane	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	ND	1.0	ND	ND	ND	0.6	ND	ND	0.5	ND	1.2	ND	ND	ND	ND
Trichloroethylene	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloromethane	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

(1) Parts per billion
(2) None detected

TABLE 3-3. CONTINUED

Date		July 2 to July 3				
Wind Speed Range (miles per hour)		2 to 21.5				
Prevailing Wind Direction		West Southwest				
Sampler Location		Upwind		Downwind		
Sampler Type		24 Hour	Controlled	24 Hour	Controlled	Co-located
Sample Number		2B-3	4A-3	1A-3	3A-3	1B-1
Sample Time		0800	0800	0800	0800	0800
Start/Stop		0800	0800	0800	0800	0800
Constituent	Detection Limit (ppb)[1]	Concentration (ppb, by volume)				
Chloroethene	2	ND[2]	ND	ND	ND	ND
Benzene	2	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.5	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.2	ND	ND	ND	ND	ND
Dichloromethane	1	ND	ND	ND	ND	ND
Tetrachloroethene	0.2	0.4	0.5	0.4	0.4	0.5
Tetrachloromethane	0.2	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	0.6	ND	ND	ND	ND
Trichloroethylene	0.6	ND	ND	ND	ND	ND
Trichloromethane	0.8	ND	ND	ND	ND	ND

(1) Parts per billion
(2) None detected

TABLE 3-4. LANDFILL GAS MIGRATION MONITORING DATA

Probe	PP-1	PP-2	Field Blank
Installation Date	6/22/90	6/22/90	N/A
Sample Date	7/3/90	7/3/90	7/3/90
Sample ID No.	PP1-3	PP2-3	Field Blank

Constituent	Detection Limit (ppb)*	Concentration (ppb)		
Chloroethene	500	ND	ND	ND
Benzene	500	ND	ND	ND
1,2-Dibromoethane	1	ND	ND	ND
1,2-Dichloroethane	20	ND	ND	ND
Dichloromethane	60	ND	ND	ND
Tetrachloroethene	10	ND	ND	ND
Tetrachloromethane	5	ND	ND	ND
1,1,1-Trichloroethane	10	ND	ND	ND
Trichloroethylene	10	ND	ND	ND
Trichloromethane	2	ND	4.9	ND

Constituent	Detection Limit (%)**	Concentration (%)		
Oxygen	0.5	21	21	0.6
Nitrogen	0.5	79	78	0.7
Carbon Monoxide	0.5	ND	ND	ND
Carbon Dioxide	0.5	0.4	0.6	ND
Methane	0.5	ND	ND	ND

ND = Not detected
* Parts per billion, by volume
** Percent, by volume

SECTION 4.0

CONCLUSIONS

The Air SWAT performed at the Naval Air Station Alameda was conducted in accordance with the Air SWAT Monitoring Plan (SCS, 1989) and State Guidelines (ARB, 1987). The completion of the testing program and submittal of this report to the BAAQMD constitute compliance with HSC 41805.5.

Summarizing the results of the Air SWAT:

- Methane was detected in only one LFG sample at a very low concentration of 3 %. Two of the 10 SACs were detected in one of the LFG samples.

- No methane was detected in the integrated surface samples. Two of the 10 SACs were detected, at very low concentrations, one in each of two separate samples. Neither of the SACs detected in the integrated surface samples were found in the LFG samples.

- Low concentrations of three of the 10 SACs were detected in 31 of the 47 ambient air samples analyzed. The SACs were found in upwind and downwind samples alike. None of the SACs detected in the ambient air samples were found in the LFG samples.

- No methane was detected in either of the landfill perimeter soil gas samples. A low concentration of one of the 10 SACS was observed in one of the landfill perimeter soil gas samples. This SAC was also observed in one of the LFG samples.

It is concluded that very little LFG is being generated in either the West Beach Landfill or the 1943 to 1956 Disposal Area. Although one of the SACs was found in subsurface gas samples collected both on and adjacent to the site, there is no evidence to indicate that the sites are emitting detectable quantities of any of the SACs into the atmosphere.

Because there is no evidence of significant LFG generation, off-site subsurface migration of LFG is not expected to pose a serious problem; however due to the fact that several structures are located in close proximity to the site, it is recommended that a LFG migration monitoring network be installed adjacent to the site and monitored on a regular basis.

SECTION 5.0

REFERENCES

1. State of California Air Resources Board. Hazardous Waste Disposal Site Testing Guidelines. 1987.

2. SCS Engineers. Monitoring Plan, Air Quality Solid Waste Assessment Test, West Beach Landfill and the 1943 to 1956 Disposal Area, Naval Air Station - Alameda, Alameda, California. Prepared for the Department of the Navy, Western Division, Naval Facilities Engineering Command, San Bruno, California. October 16, 1989.

APPENDIX A

INTERNAL GAS CHARACTERIZATION LABORATORY ANALYTICAL REPORTS

LABORATORY NUMBER: 100915-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: WA1-26

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/11/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	6	2

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 100968-1
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: WA2-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/05/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	9.4	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	39	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	16	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	4.4	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 100968-3
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: LFG-1

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/05/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	5.5	0.2
Nitrogen	70.4	0.2
Carbon Monoxide	ND	0.2
Methane	3.0	0.2
Carbon Dioxide	15	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 100968-4
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: LFG-2

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	19	0.2
Nitrogen	78	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	1.3	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 100968-5
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: LFG-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	0.2	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

LABORATORY NUMBER: 100915-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: FIELD BLANK-26A

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/11/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	0.5	0.2
Nitrogen	1.3	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	6	2

APPENDIX B

INTEGRATED SURFACE SAMPLE FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORTS

APPENDIX B – INTEGRATED SURFACE SAMPLE FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORTS

AIR QUALITY SOLID WASTE ASSESSMENT TEST REPORT

THE ABOVE IDENTIFIED APPENDIX HAS MISSING PAGES. IT COULD NOT BE DETERMINED WHETHER THESE PAGES ARE MISSING OR THE DOCUMENT WAS ISSUED WITHOUT THESE PAGES.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
SOUTHWEST
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DPM
SAMPLE I. D. NUMBER: 155-1
JOB NUMBER: 0387042
BAG NUMBER: —
SAMPLE LOCATION: —
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: —
OTHER: —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 10/25 TIME: 8:30
PROGRAM STOP: (DATE): TIME: 9:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	—	100	13.21	454.2	
	(2)	—	—	100	12.83	467.7	471.77
	(3)	—	—	100	12.16	493.4	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	—	100	16.78	357.6	
	(2)	—	—	100	17.19	350.3	353.13
	(3)	—	—	100	17.07	351.5	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	~~ATTACHMENT 1~~	(AIR) / LFG	412.45
	VINYL CHLORIDE	AIR / LFG	
	(METHANE)	(AIR) / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: —

PROGRAM STOP: Clear w/ slight breeze from W

12 / 86

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 155-4
JOB NUMBER: 0358042
BAG NUMBER: —
SAMPLE LOCATION: —
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: —
OTHER: —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 4/25 TIME: 7150
PROGRAM STOP: (DATE): — TIME: 8120

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	—	100	16.89	355.2	
	(2)	—	—	"	17.02	352.5	355.6
	(3)	—	—	"	16.71	359.1	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	—	100	13.21	454.2	
	(2)	—	—	"	12.83	467	471.8
	(3)	—	—	"	12.16	493.4	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
ATTACHMENT 1	AIR / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 413.7

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear w/ W breeze

PROGRAM STOP: —

12 / 86

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: SS-3
JOB NUMBER: 0388042
BAG NUMBER:
SAMPLE LOCATION:
EQUIPMENT I. D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION

PROGRAM START: (DATE): 6/25 TIME: 6 30
PROGRAM STOP: (DATE): 6/25 TIME: ~~1130~~ 7:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)			100	14.61	410.0	
	(2)			"	14.24	419.9	414.6
	(3)			"	14.53	412.9	
	(4)						
	(5)						
PROGRAM STOP	(1)			100	16.02	374.5	
	(2)			"	15.81	379.5	376.6
	(3)			"	15.97	375.7	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~	~~AIR~~ / LFG
VINYL CHLORIDE	AIR / LFG
~~METHANE~~	~~AIR~~ / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm: 395.6

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear w/ slight breeze from W

PROGRAM STOP:

12 / 88

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 155-3
JOB NUMBER: 0.3580.42
BAG NUMBER:
SAMPLE LOCATION:
EQUIPMENT I. D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25 TIME: 7:15
PROGRAM STOP: (DATE): TIME: 7:45

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)			100	16.02	374.5	
	(2)			"	15.81	379.5	376.6
	(3)			"	15.77	375.7	
	(4)						
	(5)						
PROGRAM STOP	(1)			100	16.89	355.2	
	(2)			"	17.02	352.5	355.6
	(3)			"	16.71	357.1	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~	~~AIR~~ / LFG
VINYL CHLORIDE	AIR / LFG
~~METHANE~~	~~AIR~~ / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm: 366.1

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear w/ slight NW breeze

PROGRAM STOP:

12 / 88

LAB NUMBER: 100891-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: ISS-1

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

GROSS GAS CONSTITUENT	Result(%)	Reporting Limit(%)
Methane	ND	0.2

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	17

LAB NUMBER: 100891-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: ISS-2

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.2	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

GROSS GAS CONSTITUENT	Result(%)	Reporting Limit(%)
Methane	ND	0.2

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	17

LAB NUMBER: 100891-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: ISS-3

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	1.2	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

GROSS GAS CONSTITUENT	Result(%)	Reporting Limit(%)
Methane	ND	0.2

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	17

LAB NUMBER: 100891-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: ISS-4

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

GROSS GAS CONSTITUENT	Result(%)	Reporting Limit(%)
Methane	ND	0.2

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

==========

Duplicate: Relative % Difference 17

APPENDIX C

AMBIENT AIR MONITORING FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORTS

APPENDIX C – AMBIENT AIR MONITORING FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORTS

AIR QUALITY SOLID WASTE ASSESSMENT TEST REPORT

THE ABOVE IDENTIFIED APPENDIX HAS MISSING PAGES. IT COULD NOT BE DETERMINED WHETHER THESE PAGES ARE MISSING OR THE DOCUMENT WAS ISSUED WITHOUT THESE PAGES.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
SOUTHWEST
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 06/24/90
DATE REPORTED: 06/28/90

LAB NUMBER: 100877

CLIENT: SCS ENGINEERS

REPORT ON: 5 AIR SAMPLES

PROJECT #: 0388042

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LAB NUMBER: 100877-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1A-24

DATE RECEIVED: 06/24/90
DATE ANALYZED: 06/26/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON DETECTION LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 3

LAB NUMBER: 100877-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 3A-24

DATE RECEIVED: 06/24/90
DATE ANALYZED: 06/26/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON DETECTION LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 3

Curtis & Tompkins, Ltd

LAB NUMBER: 100877-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 2A-24

DATE RECEIVED: 06/24/90
DATE ANALYZED: 06/26/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON DETECTION LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 3

LAB NUMBER: 100877-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 4A-24

DATE RECEIVED: 06/24/90
DATE ANALYZED: 06/26/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON DETECTION LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 3

Curtis & Tompkins, Ltd.

LAB NUMBER: 100877-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: FIELD BLANK-24

DATE RECEIVED: 06/24/90
DATE ANALYZED: 06/26/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON DETECTION LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 3

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 06/25/90
DATE REPORTED: 07/02/90

NOTE: pp. 2 - 5 ARE ISS REPORTS, SEE APPENDIX B.

LAB NUMBER: 100891

CLIENT: SCS ENGINEERS

REPORT ON: 10 AIR SAMPLES

PROJECT #: 0388042

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

LAB NUMBER: 100891-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: FIELD BLANK-25A

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

GROSS GAS CONSTITUENT	Result(%)	Reporting Limit(%)
Methane	ND	0.2

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 17

Curtis & Tompkins, Ltd.

LAB NUMBER: 100891-6
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1A-25

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	17

LAB NUMBER: 100891-7
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1B-25

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	1.1	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 17

LAB NUMBER: 100891-8
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 3A-25

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 17

LAB NUMBER: 100891-10
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 4B-25

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	17

Curtis & Tompkins, Ltd.

LAB NUMBER: 100891-11
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: FIELD BLANK-25B

DATE RECEIVED: 06/25/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/02/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 17

Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (415) 486-0900

DATE RECEIVED: 06/26/90
DATE REPORTED: 07/03/90

LAB NUMBER: 100905

CLIENT: SCS ENGINEERS

REPORT ON: 6 AIR SAMPLES

PROJECT #: 0388042
LOCATION: NAS-ALAMEDA

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

LAB NUMBER: 100905-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 4A-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.9	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 18

Curtis & Tompkins, Ltd.

LAB NUMBER: 100905-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 2B-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 18

Curtis & Tompkins, Ltd.

LAB NUMBER: 100905-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1A-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	18

Curtis & Tompkins Ltd

LAB NUMBER: 100905-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1B-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/28/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 18

LAB NUMBER: 100905-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 3A-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/28/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 18

Curtis & Tompkins, Ltd.

LAB NUMBER: 100905-6
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: FIELD BLANK-26

DATE RECEIVED: 06/26/90
DATE ANALYZED: 06/27/90
DATE REPORTED: 07/03/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 18

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (415) 486-0900

DATE RECEIVED: 06/27/90
DATE REPORTED: 07/05/90

NOTE: pp. 2 & 3 ARE INTERIM GAS REPORTS, SEE APPENDIX A.

LAB NUMBER: 100915

CLIENT: SCS ENGINEERS

REPORT ON: 8 AIR SAMPLES

PROJECT #: 0388042
LOCATION: NAS - ALAMEDA

RESULTS: SEE ATTACHED

N. E. Printer
QA/QC Approval

Final Approval

LAB NUMBER: 100915-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: 1A-27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.5	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.5	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 2

LAB NUMBER: 100915-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042- CANONIE
SAMPLE ID: 1B-27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.5	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.7	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 2

LAB NUMBER: 100915-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: 3A-27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.5	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 2

LAB NUMBER: 100915-6
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: 2B-27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.7	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 2

LAB NUMBER: 100915-7
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: 4A-27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.5	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.7	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 2

LAB NUMBER: 100915-8
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - CANONIE
SAMPLE ID: FIELD BLANK - 27

DATE RECEIVED: 06/27/90
DATE ANALYZED: 06/29/90
DATE REPORTED: 07/05/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 2

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 07/02/90
DATE REPORTED: 07/06/90

LAB NUMBER: 100946

CLIENT: SCS ENGINEERS

REPORT ON: 18 AIR SAMPLES

PROJECT #: 0388042
LOCATION: NAS - ALAMEDA

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

LAB NUMBER: 100946-1
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1A-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	11

LAB NUMBER: 100946-2
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1B-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 11

Curtis & Tompkins, Ltd

LAB NUMBER: 100946-3
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 2B-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	11

LAB NUMBER: 100946-4
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 3A-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	11

LAB NUMBER: 100946-5
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 4A-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	1.1	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	1.0	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 11

LAB NUMBER: 100946-6
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - NAS ALAMEDA
SAMPLE ID: FIELD BLANK-30

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/02/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-7
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1A-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-8
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1B-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.3	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd.

LAB NUMBER: 100946-9
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 2B-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.6	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-10
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 3A-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	2.7	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.5	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd.

LAB NUMBER: 100946-11
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 4A-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference	5

LAB NUMBER: 100946-12
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - NAS ALAMEDA
SAMPLE ID: FIELD BLANK-1

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-13
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1A-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	1.3	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-14
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 1B-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-15
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 2B-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

NOTE: BAG RECEIVED WITH VALVE IN OPEN POSITION

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	4.2	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	1.2	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-16
CLIENT: SCS ENGINEERS
PROJECT #: 0388042 - NAS ALAMEDA
SAMPLE ID: 3A-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100946-17
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: 4A-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND*	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

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Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd.

LAB NUMBER: 100946-18
CLIENT: SCS ENGINEERS
PROJECT #:0388042 - NAS ALAMEDA
SAMPLE ID: FIELD BLANK-2

DATE RECEIVED: 07/02/90
DATE ANALYZED: 07/03/90
DATE REPORTED: 07/06/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 07/03/90
DATE REPORTED: 07/16/90

LAB NUMBER: 100968

CLIENT: SCS ENGINEERS

REPORT ON: 12 AIR SAMPLES - 6 SAMPLES NPLE INTERNAL GAS (4) & PERIMETER SOIL GAS (2) SAMPLES, SEE APPENDICES A & E

PROJECT #: 0388042
LOCATION: NAS-ALAMEDA

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd

LAB NUMBER: 100968-9
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: 2B-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	0.6	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LAB NUMBER: 100968-11
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: 4A-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.5	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LAB NUMBER: 100968-7
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: 1A-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LAB NUMBER: 100968-8
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: 1B-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.4	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LAB NUMBER: 100968-10
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: 3A-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.5	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd.

LAB NUMBER: 100968-12
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: FIELD BLANK-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2
Dichloromethane (Methylene chloride)	ND	1
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	0.6	0.2
Nitrogen	0.7	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	ND	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM / MW
SAMPLE I. D. NUMBER: 2A-21
JOB NUMBER: 038042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/20 TIME: 0800
PROGRAM STOP: (DATE): 6/21 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	6+	3	30.08	5.99	6.33
	(2)	—	5.5	3	27.77	6.48	
	(3)	—	5-	3	27.63	6.51	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	7	3	22.48	8.01	7.21
	(2)	—	6+	3	25.91	6.95	
	(3)	—	5+	3	27.02	6.66	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
(ATTACHMENT 1)	(AIR) / LFG	6.77
VINYL CHLORIDE	AIR / LFG	
METHANE	AIR / LFG	
FIXED GASES	AIR / LFG	
OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM / MW

SAMPLE I. D. NUMBER: 4A-21

JOB NUMBER: 038X042

BAG NUMBER: —

SAMPLE LOCATION: DIR - UP

EQUIPMENT I. D. NUMBER: —

SAMPLE STATION NUMBER: 4A

OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/20 TIME: 0800

PROGRAM STOP: (DATE): 6/21 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	~6.5	3	27.66	6.51	
	(2)	—	6+	3	28.70	6.25	6.38
	(3)	—	~6.5	3	28.17	6.39	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	8	3	24.81	7.26	
	(2)	—	8	3	25.47	7.07	≈ 7.00
	(3)	—	7-	3	27.03	6.66	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 6.69

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM / MW

SAMPLE I. D. NUMBER: 1A-21

JOB NUMBER: 0388042.

BAG NUMBER: —

SAMPLE LOCATION: 24HR - DOWN

EQUIPMENT I. D. NUMBER: —

SAMPLE STATION NUMBER: 1A

OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/20 TIME: 0800

PROGRAM STOP: (DATE): 6/21 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	8.-	3	21.45	8.39	
	(2)	—	6+	3	24.19	7.44	7.34
	(3)	—	15.5	3	29.02	6.20	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	7	3	21.13	8.51	
	(2)	—	7-	3	[illegible]	8.00	8.48
	(3)	—	7-	3	[illegible]	—	
	(4)	—	—	—	22.24	8.09	
	(5)	—	—	—	20.41	8.82	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~ / ~~VINYL CHLORIDE~~	(AIR) / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	AIR / LFG

SAMPLE AVERAGE FLOW cc/mm: 7.91

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Overcast

PROGRAM STOP: Overcast

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM / MW
SAMPLE I. D. NUMBER: 3B-21
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: DIR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/20 TIME: 0800
PROGRAM STOP: (DATE): 6/21 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		6-	3	28.17	6.39	
	(2)		6	3	33.39	5.39	5.95
	(3)		6+	3	29.66	6.07	
	(4)						
	(5)						
PROGRAM STOP	(1)		14	3	27.93	7.85	
	(2)		15	3	20.61	8.77	8.35
	(3)		13	3	21.23	8.48	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ____	

SAMPLE AVERAGE FLOW cc/mm: 7.15

BATTERY CHECK: ☑ OK ☑ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: PDM
SAMPLE I. D. NUMBER: 24-22
JOB NUMBER: 0384042
BAG NUMBER: —
SAMPLE LOCATION: 24-UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 24
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/21~~ 6/21 TIME: 0800
PROGRAM STOP: (DATE): ~~6/22~~ 6/22 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		7	3	22.48	8.00	
	(2)		6+	3	25.91	6.95	7.21
	(3)		5+	3	27.02	6.66	
	(4)						
	(5)						
PROGRAM STOP	(1)		8	3	22.74	7.91	
	(2)		9	3	21.07	8.54	8.11
	(3)		9-	3	22.83	7.88	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ____	

SAMPLE AVERAGE FLOW cc/mm: 7.66

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM

SAMPLE I. D. NUMBER: 4B-22

JOB NUMBER: 0348047.00

BAG NUMBER: —

SAMPLE LOCATION: [illegible] Richford-UP

EQUIPMENT I. D. NUMBER: —

SAMPLE STATION NUMBER: 4B

OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/21

TIME: 0800

PROGRAM STOP: (DATE): 6/22

TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	21.23	8.48	
	(2)	—	7	3	24.04	7.49	7.63
	(3)	—	[illegible] 7	3	26.06	6.91	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.59	9.68	
	(2)	—	9+	3	19.02	9.46	9.55
	(3)	—	9+	3	18.91	9.52	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	8.59
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START:

PROGRAM STOP:

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-22
JOB NUMBER: 0348042
BAG NUMBER: —
SAMPLE LOCATION: 24-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/21 TIME: 0800
PROGRAM STOP: (DATE): 6/22 TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	7	3	21.13	8.52	8.48
	(2)	—	7-	3	22.24	8.09	
	(3)	—	7-	3	20.41	8.82	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	14.36	12.53	12.13
	(2)	—	10-	3	15.27	11.79	
	(3)	—	10-	3	14.91	12.07	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	10.31
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3B-22
JOB NUMBER: 0384042
BAG NUMBER: —
SAMPLE LOCATION: DIR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3B
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/21
TIME: 0800
PROGRAM STOP: (DATE): 6/22
TIME: 0800

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	~~14~~	3	22.93	7.85	
	(2)	—	15	3	20.61	8.73	8.35
	(3)	—	13	3	21.23	8.48	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.49	9.73	
	(2)	—	10	3	19.04	9.45	9.67
	(3)	—	10	3	18.32	9.83	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 9.01

BATTERY CHECK: ☒ OK ☑ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START:

PROGRAM STOP:

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2A-24
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24HR-VP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/22~~ 6/23 TIME: ~~0800~~ 1500
PROGRAM STOP: (DATE): ~~6/23~~ 6/24 TIME: ~~0800~~ 1500

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	8	3	22.74	7.92	
	(2)	—	9	3	21.07	8.54	
	(3)	—	9-	3	22.83	7.89	8.11
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	12	3	15.64	11.51	
	(2)	—	7	3	20.70	~~9.70~~	10.05
	(3)	—	6+	3	18.09	9.95	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR / LFG)	9.08
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: —

PROGRAM STOP: Barometer 30.010 in of Hg at 23' msl

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DOM
SAMPLE I. D. NUMBER: 4A - 24
JOB NUMBER: 038804Z.00
BAG NUMBER: —
SAMPLE LOCATION: DIR - UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 4A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/22 6/23 TIME: 1500
PROGRAM STOP: (DATE): 6/23 6/24 TIME: 1500

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	19.35	9.28	
	(2)	—	10	3	19.71	9.13	9.59
	(3)	—	10	3	17.39	10.35	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	12	3	15.84	11.36	
	(2)	—	10	3	19.16	9.39	9.97
	(3)	—	10	3	19.63	9.17	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.78
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: —

PROGRAM STOP: —

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-24
JOB NUMBER: 6388042
BAG NUMBER: —
SAMPLE LOCATION: ~~BAX~~ 24HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER: —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/22~~ 6/23 TIME: ~~0800~~ 1500
PROGRAM STOP: (DATE): ~~6/23~~ 6/24 TIME: ~~0800~~ 1500

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	14.36	12.53	
	(2)	—	10 -	3	~~15.27~~	~~11.79~~	12.28
	(3)	—	10 -	3	14.91	12.07	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	14.27	12.61	
	(2)	—	10	3	13.98	~~12.84~~	12.58
	(3)	—	10	3	14.71	12.24	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
ATTACHMENT I	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 12.43

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START:

PROGRAM STOP:

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM

SAMPLE I. D. NUMBER: 3A-24

JOB NUMBER: 0388042

BAG NUMBER: ______

SAMPLE LOCATION: DIR-DOWN

EQUIPMENT I. D. NUMBER: ______

SAMPLE STATION NUMBER: 3A

OTHER: ______

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/22~~ 6/23 TIME: ~~[illegible]~~ 1500

PROGRAM STOP: (DATE): ~~6/23~~ 6/24 TIME: ~~[illegible]~~ 1500

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		12	3	16.41	10.97	
	(2)		12	3	17.28	10.42	10.65
	(3)		12	3	17.03	10.57	
	(4)						
	(5)						
PROGRAM STOP	(1)		11	3	17.79	10.12	
	(2)		10+	3	18.10	9.94	9.82
	(3)		10	3	19.12	9.41	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1) (circled)	(AIR) (circled) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ______	

SAMPLE AVERAGE FLOW cc/mm: 10.24

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: ______

PROGRAM STOP: the strip chart had stopped on 6/23, but pumps working? Restarted for 6/24.

[illegible] dead on Friday. [illegible] rescheduled for 1500

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 43-25
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: DIR-UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 43
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/24 TIME: 3:00
PROGRAM STOP: (DATE): 6/25 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	11	3	15.06	11.95	
	(2)	—	10	3	18.22	9.88	
	(3)	—	11	3	16.13	11.16	10.99
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.43	9.77	
	(2)	—	N/A	N/A	N/A	N/A	
	(3)	—	9	3	20.16	8.93	9.63
	(4)	—	10	3	18.02	9.99	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 10.31

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear + Sunny

PROGRAM STOP: Sunny

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-25
JOB NUMBER: 038042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/24 TIME: 3:00
PROGRAM STOP: (DATE): 6/25 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	14.27	12.61	
	(2)	—	10	3	13.98	12.84	12.54
	(3)	—	10	3	14.71	12.24	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.13	9.93	
	(2)	—	9	3	18.26	9.86	10.09
	(3)	—	10	3	17.19	10.47	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	11.34
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START:

PROGRAM STOP:

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-25
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: DIR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/24
TIME: 3:07
PROGRAM STOP: (DATE): 6/25
TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		11	3	17.79	10.12	
	(2)		10+	3	18.10	9.94	9.82
	(3)		10	3	19.12	9.41	
	(4)						
	(5)						
PROGRAM STOP	(1)		9	3	19.41	9.27	
	(2)		9	3	19.88	9.05	9.89
	(3)		8	3	20.14	8.94	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.46
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER _____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear w/ gusty winds

PROGRAM STOP: _____

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1B-25
JOB NUMBER: 038042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/24 TIME: 3:00
PROGRAM STOP: (DATE): 6/25 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	11	3	13.86	12.99	
	(2)	—	10	3	16.50	10.91	11.55
	(3)	—	10	3	16.73	10.76	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.63	9.66	
	(2)	—	9	3	20.13	8.94	9.31
	(3)	—	10	3	19.29	9.33	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	~~ATTACHMENT 1~~	(AIR) / LFG	
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	10.43
	FIXED GASES	AIR / LFG	
	OTHER ____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear + Sunny

PROGRAM STOP: —

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2B-25
JOB NUMBER: 0385042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - OD
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2B A Smit
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/24
TIME: 3:00
PROGRAM STOP: (DATE): 6/25
TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	7	3	24.76	7.27	
	(2)	—	7	3	25.61	7.02	
	(3)	—	6+	3	26.39	6.82	7.04
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	7	3	23.91	7.53	
	(2)	—	[illegible]	[illegible]	[illegible]	—	7.60
	(3)	—	7	3	24.53	7.34	
	(4)	—	8	3	22.67	7.94	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR / LFG)
~~VINYL CHLORIDE~~	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 7.32

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear + Sunny

PROGRAM STOP: —

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 23-26
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 26
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25
TIME: 3:00
PROGRAM STOP: (DATE): 6/26
TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		7	3	23.91	7.53	7.60
	(2)		7	3	24.53	7.34	
	(3)		8	3	22.67	7.94	
	(4)						
	(5)						
PROGRAM STOP	(1)		9	3	20.65	8.72	8.97
	(2)		8	3	20.51	8.78	
	(3)		8	3	19.14	9.40	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
(ATTACHMENT 1)	(AIR) / LFG	8.29
VINYL CHLORIDE	AIR / LFG	
METHANE	AIR / LFG	
FIXED GASES	AIR / LFG	
OTHER ____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS:

PROGRAM START: Sunny

PROGRAM STOP: Sunny

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 4A-26
JOB NUMBER: 0358042
BAG NUMBER: —
SAMPLE LOCATION: DIR-UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 4A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25
TIME: 3:00
PROGRAM STOP: (DATE): 6/26
TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.43	9.77	
	(2)		9	3	20.16	8.93	9.56
	(3)		10	3	18.02	9.99	
	(4)						
	(5)						
PROGRAM STOP	(1)		9	3	21.48	8.36	
	(2)		8	3	22.09	8.15	8.27
	(3)		9	3	21.73	8.28	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	ATTACHMENT 1	(AIR) / LFG	8.92
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER ____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Sunny

PROGRAM STOP: Barometer 30.01

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM

SAMPLE I.D. NUMBER: 1A-26

JOB NUMBER: 0388042

BAG NUMBER: ——

SAMPLE LOCATION: 24HR - DOWN

EQUIPMENT I.D. NUMBER: ——

SAMPLE STATION NUMBER: 1A

OTHER: ——

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25 TIME: 3:00

PROGRAM STOP: (DATE): 6/26 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.13	9.93	10.09
	(2)		9	3	18.26	9.86	
	(3)		10	3	17.19	10.47	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.43	9.77	9.34
	(2)		10-	3	19.27	9.34	
	(3)		9	3	20.23	8.90	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ______	

SAMPLE AVERAGE FLOW cc/mm: 9.72

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Sunny

PROGRAM STOP: Sunny

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-26
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: DIR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: WR 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25
TIME: 3:00
PROGRAM STOP: (DATE): 6/26
TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	9	3	19.41	9.27	
	(2)	—	9	3	19.88	9.05	9.04
	(3)	—	9	3	20.14	8.94	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	9	3	20.16	8.93	
	(2)	—	9	3	20.25	8.89	8.61
	(3)	—	9	3	21.78	8.26	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT)	(AIR) LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 8.89

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear & Sunny

PROGRAM STOP: —

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1B-26
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24HR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1B
OTHER: —

SAMPLE TYPE: ~~AMBIENT AIR~~ / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/25 TIME: 3:00
PROGRAM STOP: (DATE): 6/26 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.63	9.66	
	(2)	—	9	3	20.13	8.94	9.31
	(3)	—	10	3	19.29	9.33	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.46	9.75	
	(2)	—	10	3	17.61	10.22	9.94
	(3)	—	10	3	18.29	9.84	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	ATTACHMENT 1	AIR / LFG	9.63
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear + Sunny w/ a breeze

PROGRAM STOP: Sunny

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2B-27
JOB NUMBER: 03580642.00
BAG NUMBER: —
SAMPLE LOCATION: 24HR - VR
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/26 TIME: 3:00
PROGRAM STOP: (DATE): 6/27 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

	ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
	BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START (1)		9	3	20.65	8.72	
(2)		8	3	20.51	8.78	8.97
(3)		8	3	19.14	9.40	
(4)						
(5)						
PROGRAM STOP (1)		10	3	18.46	9.75	
(2)		9	3	19.33	9.31	9.53
(3)		9	3	18.91	9.52	
(4)						
(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.25
	~~VINYL CHLORIDE~~	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear + Sunny

PROGRAM STOP:

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 4A-27
JOB NUMBER: 038042
BAG NUMBER: —
SAMPLE LOCATION: DIR-VP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 4A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/26 TIME: 3:00
PROGRAM STOP: (DATE): 6/27 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		9	3	21.48	8.38	
	(2)		8	3	22.09	8.14	
	(3)		9	3	21.73	8.28	8.27
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	17.46	10.08	
	(2)		11	3	17.21	10.46	10.12
	(3)		10	3	18.32	9.83	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
~~VINYL CHLORIDE~~	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm: 9.20

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: OK battery, clear + sunny

PROGRAM STOP: Changed battery

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: IA-27
JOB NUMBER: 0358042
BAG NUMBER: —
SAMPLE LOCATION: IA 24HR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: IA
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/26 TIME: 3:00
PROGRAM STOP: (DATE): 6/27 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.43	9.77	
	(2)	—	10-	3	19.27	9.34	9.34
	(3)	—	[illegible]	[illegible]	[illegible]		
	(4)	—	9	3	20.23	8.90	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.24	9.87	
	(2)	—	10-	3	19.07	9.44	9.65
	(3)	—	10	3	18.64	9.63	
	(4)	—	—	—	—	—	—
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 9.50

BATTERY CHECK: ☑ OK ☑ LOW (stop) LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear 4 / W wind

PROGRAM STOP: Changed Battery

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-27
JOB NUMBER: D388042
BAG NUMBER: —
SAMPLE LOCATION: DIR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/26 TIME: 3'06
PROGRAM STOP: (DATE): 6/27 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		9	3	20.16	8.93	
	(2)		9+	3	20.25	8.89	
	(3)		9	3	21.78	8.26	8.69
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.36	9.80	
	(2)		9	3	21.18	8.50	9.05
	(3)		9	3	20.32	8.86	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ____	

SAMPLE AVERAGE FLOW cc/mm: 8.87

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:
PROGRAM START: Clear & Sunny
PROGRAM STOP: Changed battery

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 13-27
JOB NUMBER: 0358042
BAG NUMBER: —
SAMPLE LOCATION: 24 - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 13
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/26 TIME: 3:00
PROGRAM STOP: (DATE): 6/27 TIME: 3:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.46	9.75	
	(2)		10	3	17.61	10.22	
	(3)		10	3	18.29	9.84	9.94
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.93	9.51	
	(2)		10+	3	18.03	9.98	9.71
	(3)		10	3	18.67	9.64	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.83
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear & Sunny w/ strong W wind

PROGRAM STOP:

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM

SAMPLE I. D. NUMBER: 2B-~~29~~ 30

JOB NUMBER: 0388042

BAG NUMBER: —

SAMPLE LOCATION: 24 HR - UP

EQUIPMENT I. D. NUMBER: —

SAMPLE STATION NUMBER: 2B

OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/27~~ 6/28 6/29 TIME: ~~8:00~~ 8:00

PROGRAM STOP: (DATE): ~~6/28~~ 6/29 6/30 TIME: ~~8:00~~ 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.46	9.75	
	(2)	—	9	3	19.33	9.31	9.53
	(3)	—	9	3	18.91	9.52	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	9	3	18.67	9.64	
	(2)	—	9	3	19.26	9.35	9.47
	(3)	—	9	3	19.11	9.42	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
~~VINYL CHLORIDE~~	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 9.50

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear + Sunny 6/27; Overcast w/s wind 6/28 Wind

PROGRAM STOP: —

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: _____ SAMPLE I. D. NUMBER: 4A-30

JOB NUMBER: _____ BAG NUMBER: _____

SAMPLE LOCATION: DIR-UP EQUIPMENT I. D. NUMBER: _____

SAMPLE STATION NUMBER: 4A OTHER: _____

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/27 6/28 6/29 TIME: 3:00 8:00

PROGRAM STOP: (DATE): 6/28 6/29 6/30 TIME: 3:00 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	17.86	10.08	
	(2)		11	3	17.21	10.46	
	(3)		10	3	18.32	9.83	10.12
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.65	9.65	
	(2)		9	3	20.41	8.82	7.44
	(3)		10	3	18.29	9.84	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
ATTACHMENT 1	(AIR) / LFG
~~VINYL CHLORIDE~~	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER _____	

SAMPLE AVERAGE FLOW cc/mm: 9.78

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: _____

PROGRAM STOP: _____

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DCM
SAMPLE I. D. NUMBER: 1A - [illegible] 30
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24Hr - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): [illegible] 6/29
TIME: [illegible] 8:00
PROGRAM STOP: (DATE): [illegible] 6/30
TIME: [illegible] 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.25	9.87	
	(2)		10-	3	19.07	9.44	9.65
	(3)		10	3	18.69	9.63	
	(4)						
	(5)						
PROGRAM STOP	(1)		9	3	21.13	8.52	
	(2)		10	3	18.61	9.67	9.38
	(3)		10	3	18.09	9.95	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.52
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER _____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear & Sunny, Overcast w/ S wind

PROGRAM STOP: Rotometer ball was stuck -

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-~~22~~ 30
JOB NUMBER: 0368042.00
BAG NUMBER: —
SAMPLE LOCATION: DIRECTIONAL - DOWNWIND
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/27~~ ~~6/28~~ 6/29 6/27 TIME: ~~3:00~~ 8:00
PROGRAM STOP: (DATE): ~~6/28~~ ~~6/29~~ 6/30 TIME: ~~3:00~~ 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.36	9.80	
	(2)	—	9	3	21.18	8.50	9.05
	(3)	—	9	3	20.32	8.86	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	9	3	19.32	9.31	
	(2)	—	10	3	17.93	10.04	9.38
	(3)	—	9	3	20.51	8.74	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	~~ATTACHMENT 1~~	~~AIR~~ / LFG	9.22
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear + Sunny, Changed batteries —
6/28 - battery had stopped overnight + restarted

PROGRAM STOP: Sunny

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: IB-30
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 13
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): ~~6/27~~ ~~6/28~~ 6/24 TIME: ~~5:00~~ 8:00
PROGRAM STOP: (DATE): ~~6/28~~ ~~6/29~~ 6/30 TIME: 8:00 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.93	9.33	
	(2)	—	10+	3	18.03	9.94	
	(3)	—	10	3	18.67	9.64	9.65
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.47	9.75	
	(2)	—	10	3	18.98	9.48	9.87
	(3)	—	11	3	17.36	10.37	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.76
	~~VINYL CHLORIDE~~	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: ~~Clear & Sunny~~, Over cast w/ Sun

PROGRAM STOP: —

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2B-1
JOB NUMBER: 0358042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/30
TIME: 8:00
PROGRAM STOP: (DATE): 7/1
TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	9	3	19.67	9.75	
	(2)	—	9	3	19.26	9.31	
	(3)	—	9-	3	19.11	9.52	9.53
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	9	3	19.43	9.26	
	(2)	—	10	3	19.40	9.78	9.52
	(3)	—	10	3	18.69	9.63	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.55
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DFM
SAMPLE I. D. NUMBER: 4A-00 1
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: DIR - VP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 4A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/30 TIME: 8:00
PROGRAM STOP: (DATE): 7/1 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.65	9.65	
	(2)		9	3	20.41	8.82	9.44
	(3)		10	3	18.29	9.84	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	14.63	9.66	
	(2)		10	3	17.17	10.48	10.14
	(3)		10	7	17.51	10.28	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	AIR / LFG	9.79
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER ____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-1
JOB NUMBER: 63880.42
BAG NUMBER:
SAMPLE LOCATION: 24 HR - DOWN
EQUIPMENT I. D. NUMBER:
SAMPLE STATION NUMBER: 1A
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/30 TIME: 8:00
PROGRAM STOP: (DATE): 7/1 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		9	3	21.13	8.52	
	(2)		10	3	18.61	9.67	9.38
	(3)		10	3	18.09	9.95	
	(4)						
	(5)						
PROGRAM STOP	(1)		~~10~~ 9	3	~~18.96~~ 19.74	9.12	
	(2)		~~10~~ 9	3	~~19.34~~ 17.37	10.24	9.58
	(3)		~~10~~ 9	3	~~19.04~~ 17.12	9.39	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm: 9.48

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:
PROGRAM START: Sunny
PROGRAM STOP: Overcast 29.97

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-1
JOB NUMBER: 0348042
BAG NUMBER: —
SAMPLE LOCATION: DIR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/30 TIME: 8:00
PROGRAM STOP: (DATE): 7/1 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		~~10~~				
	(2)		~~11~~				9.37
	(3)		~~9~~	3	19.33	9.31	
	(4)		10	3	12.93	10.04	
	(5)		9	3	20.51	8.77	
PROGRAM STOP	(1)		10	3	18.46	9.75	
	(2)		10	3	19.24	9.36	9.52
	(3)		10	3	19.04	9.45	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ____	

SAMPLE AVERAGE FLOW cc/mm: 9.45

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Sunny w/ little wind

PROGRAM STOP:

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1B-1
JOB NUMBER: 03880V2
BAG NUMBER: —
SAMPLE LOCATION: 24 H2 - Down
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 6/30 TIME: 8:00
PROGRAM STOP: (DATE): 7/1 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.47	9.75	
	(2)	—	10	3	18.58	9.48	
	(3)	—	11	3	17.36	10.37	9.87
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	11	3	16.38	10.99	
	(2)	—	16	3	18.62	9.67	
	(3)	—	10	3	18.56	9.70	10.12
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.99
	~~VINYL CHLORIDE~~	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☒ ~~OK~~ ☐ LOW

LEAK CHECK ☐ ~~OK~~

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Overcast

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2B-2
JOB NUMBER: 0388042
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 2B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/1 TIME: 8:00
PROGRAM STOP: (DATE): 7/2 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	9	3	18.67	9.75	
	(2)	—	9	3	19.24	9.31	
	(3)	—	9-	3	19.11	9.52	9.53
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	17.63	10.21	
	(2)	—	10	3	19.32	9.83	9.99
	(3)	—	10	3	18.10	9.94	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.76
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Sunny

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 4A-2
JOB NUMBER: 03588042
BAG NUMBER: —
SAMPLE LOCATION: DIR-UP
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 4A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/7 TIME: 8:00
PROGRAM STOP: (DATE): 7/2 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.63	9.66	
	(2)		10	3	[illegible]	17.17 10.48	10.14
	(3)		16	3	17.51	10.28	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	19.16	9.91	
	(2)		9	3	19.64	9.16	9.07
	(3)		9	3	19.95	9.02	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER ____	

SAMPLE AVERAGE FLOW cc/mm: 9.61

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Sunny

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-2
JOB NUMBER: 0388042
BAG NUMBER:
SAMPLE LOCATION: 24HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/1 TIME: 8:00
PROGRAM STOP: (DATE): 7/2 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		9	3	19.79	9.12	
	(2)		9	3	17.57	10.24	9.58
	(3)		9	3	19.17	9.39	
	(4)						
	(5)						
PROGRAM STOP	(1)		9	3	18.59	9.68	
	(2)		10	3	17.68	10.18	9.80
	(3)		9	3	18.87	9.54	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) LFG	9.69
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Overcast

PROGRAM STOP: Sunny

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 3A-2
JOB NUMBER: 0398042
BAG NUMBER: —
SAMPLE LOCATION: DIR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/1
TIME: 8:00
PROGRAM STOP: (DATE): 7/2
TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	19.46	9.75	9.52
	(2)		10	3	19.24	9.36	
	(3)		10	3	19.04	9.45	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.12	9.93	9.54
	(2)		10	3	19.40	9.28	
	(3)		10	3	19.14	9.40	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
(ATTACHMENT 1)	(AIR) / LFG	9.53
VINYL CHLORIDE	AIR / LFG	
METHANE	AIR / LFG	
FIXED GASES	AIR / LFG	
OTHER ____		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:
PROGRAM START: ____
PROGRAM STOP: Sunny w/ W wind
Barometer 29.97

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1B-2
JOB NUMBER: 0238047
BAG NUMBER:
SAMPLE LOCATION: 24 HR-DOWN
EQUIPMENT I. D. NUMBER:
SAMPLE STATION NUMBER: 1B
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/1 TIME: 8:00
PROGRAM STOP: (DATE): 7/2 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		11	3	16.38	10.99	
	(2)		10	3	18.62	9.67	
	(3)		10	3	18.56	9.70	10.12
	(4)						
	(5)						
PROGRAM STOP	(1)		11	3	15.46	11.64	
	(2)		10	3	17.37	10.36	11.29
	(3)		11	3	15.17	11.87	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
~~VINYL CHLORIDE~~	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm: 10.71

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Overcast

PROGRAM STOP: Sunny

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 2B-3
JOB NUMBER: 0388047
BAG NUMBER: —
SAMPLE LOCATION: 24-12 - 17
EQUIPMENT I. D. NUMBER:
SAMPLE STATION NUMBER: 2B
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/2
TIME: 8:00
PROGRAM STOP: (DATE): 7/3
TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	17.63	10.21	
	(2)		10	3	19.32	9.83	9.99
	(3)		10	3	18.10	7.94	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	7.83	10.10	
	(2)		9	3	18.22	9.88	9.91
	(3)		10	3	18.47	9.75	
	(4)						
	(5)						

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	9.95
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear

PROGRAM STOP: Clear

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DJM

JOB NUMBER: 0383042

SAMPLE LOCATION: D.R - UP

SAMPLE STATION NUMBER: 4A

SAMPLE I.D. NUMBER: 4A-3

BAG NUMBER: —

EQUIPMENT I.D. NUMBER: —

OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/2 TIME: 8:00

PROGRAM STOP: (DATE): 7/3 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)		10	3	18.16	9.91	9.07
	(2)		9	3	19.64	9.16	
	(3)		9	3	19.95	9.02	
	(4)						
	(5)						
PROGRAM STOP	(1)		10	3	18.31	9.83	10.03
	(2)		10	3	17.14	10.50	
	(3)		10	3	18.46	9.75	
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
ATTACHMENT 1	AIR / LFG	9.55
VINYL CHLORIDE	AIR / LFG	
METHANE	AIR / LFG	
FIXED GASES	AIR / LFG	
OTHER ______		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear

PROGRAM STOP: Clear

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DEM
SAMPLE I. D. NUMBER: 1A-3
JOB NUMBER: 388042
BAG NUMBER: —
SAMPLE LOCATION: 24HR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/2
TIME: 8:00
PROGRAM STOP: (DATE): 7/3
TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	9	3	18.57	9.68	
	(2)	—	10	3	17.09	10.18	9.80
	(3)	—	9	3	18.87	9.54	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	17.08	10.54	
	(2)	—	10	3	1763	10.27	10.29
	(3)	—	10	3	1789	10.06	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:	COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
	(ATTACHMENT 1)	(AIR) / LFG	10.05
	VINYL CHLORIDE	AIR / LFG	
	METHANE	AIR / LFG	
	FIXED GASES	AIR / LFG	
	OTHER —		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Clear

PROGRAM STOP: Clear

CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DFH
SAMPLE I. D. NUMBER: 3A-3
JOB NUMBER: 03580412
BAG NUMBER: —
SAMPLE LOCATION: DIR-DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 3A
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/2
TIME: 8:00
PROGRAM STOP: (DATE): 7/3
TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	18.12	9.93	
	(2)	—	10	3	19.40	9.28	9.54
	(3)	—	10	3	19.14	9.40	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	18.07	9.96	
	(2)	—	10	3	18.33	982	9.73
	(3)	—	10	3	19.12	9.41	
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~ATTACHMENT 1~~	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 9.64

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Clear

PROGRAM STOP: Clear

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CALDERON AIR SWAT FIELD DATA SHEET

PERSONNEL: DFW
SAMPLE I. D. NUMBER: 1B-3
JOB NUMBER: 0388047
BAG NUMBER: —
SAMPLE LOCATION: 24 HR - DOWN
EQUIPMENT I. D. NUMBER: —
SAMPLE STATION NUMBER: 1B
OTHER: —

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION

PROGRAM START: (DATE): 7/2 TIME: 8:00
PROGRAM STOP: (DATE): 7/3 TIME: 8:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/mm)	(cc/min)
PROGRAM START	(1)	—	10	3	15.46	11.64	
	(2)	—	16	3	17.37	10.36	
	(3)	—	10	3	15.17	11.87	11.29
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—
PROGRAM STOP	(1)	—	10	3	17.67	10.19	
	(2)	—	10	3	17.11	10.52	
	(3)	—	9	3	18.29	9.84	10.18
	(4)	—	—	—	—	—	
	(5)	—	—	—	—	—	—

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(ATTACHMENT 1)	(AIR) / LFG
VINYL CHLORIDE	AIR / LFG
METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER —	

SAMPLE AVERAGE FLOW cc/mm: 10.74

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

PROGRAM START: Sunny

PROGRAM STOP: Sunny

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Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street. Berkeley. CA 94710. Phone (415) 486-0900

DATE RECEIVED: 06/21/90
DATE REPORTED: 06/27/90

LAB NUMBER: 100849

CLIENT: SCS ENGINEERS

REPORT ON: 5 AIR SAMPLES

PROJECT #: 0388042.00
LOCATION: NAS-ALAMEDA

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

LAB NUMBER: 100849-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042.00
SAMPLE ID: 1A-21

DATE RECEIVED: 06/21/90
DATE ANALYZED: 06/22/90
DATE REPORTED: 06/27/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.2	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins Ltd

LAB NUMBER: 100849-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042.00
SAMPLE ID: 3B-21

DATE RECEIVED: 06/21/90
DATE ANALYZED: 06/22/90
DATE REPORTED: 06/27/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins Ltd

LAB NUMBER: 100849-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042.00
SAMPLE ID: 4A-21

DATE RECEIVED: 06/21/90
DATE ANALYZED: 06/22/90
DATE REPORTED: 06/27/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

LAB NUMBER: 100849-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042.00
SAMPLE ID: 2A-21

DATE RECEIVED: 06/21/90
DATE ANALYZED: 06/22/90
DATE REPORTED: 06/27/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

==========

Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd.

LAB NUMBER: 100849-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042.00
SAMPLE ID: FIELD BLANK-21

DATE RECEIVED: 06/21/90
DATE ANALYZED: 06/22/90
DATE REPORTED: 06/27/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon reporting limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 5

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 06/22/90
DATE REPORTED: 06/28/90

LAB NUMBER: 100866

CLIENT: SCS ENGINEERS

REPORT ON: 5 AIR SAMPLES

PROJECT #: 0388042

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

LAB NUMBER: 100866-1
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 4B-22

DATE RECEIVED: 06/22/90
DATE ANALYZED: 06/25/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 27

Curtis & Tompkins, Ltd.

LAB NUMBER: 100866-2
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 2A-22

DATE RECEIVED: 06/22/90
DATE ANALYZED: 06/25/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 27

LAB NUMBER: 100866-3
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 1A-22

DATE RECEIVED: 06/22/90
DATE ANALYZED: 06/25/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	2.5	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	3.3	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.2	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 27

Curtis & Tompkins, Ltd

LAB NUMBER: 100866-4
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: 3B-22

DATE RECEIVED: 06/22/90
DATE ANALYZED: 06/25/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	0.2	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

Duplicate: Relative % Difference 27

Curtis & Tompkins, Ltd.

LAB NUMBER: 100866-5
CLIENT: SCS ENGINEERS
PROJECT #: 0388042
SAMPLE ID: FIELD BLANK-22

DATE RECEIVED: 06/22/90
DATE ANALYZED: 06/25/90
DATE REPORTED: 06/28/90

Report on Analysis of Gas Samples for Trace Organic Constituents

CALDERON AMBIENT TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	CALDERON REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	2.0
Dichloromethane (Methylene chloride)	ND	1.0
Trichloromethane (Chloroform)	ND	0.8
1,1,1-Trichloroethane (Methylchloroform)	ND	0.5
Tetrachloromethane (Carbon tetrachloride)	ND	0.2
1,2-Dichloroethane (Ethylene Dichloride)	ND	0.2
Trichloroethylene	ND	0.6
Tetrachloroethene (Perchloroethylene)	ND	0.2
1,2-Dibromoethane (EDB)	ND	0.5
Benzene	ND	2.0

ND = Not detected at or above Calderon detection limit.

QA/QC SUMMARY

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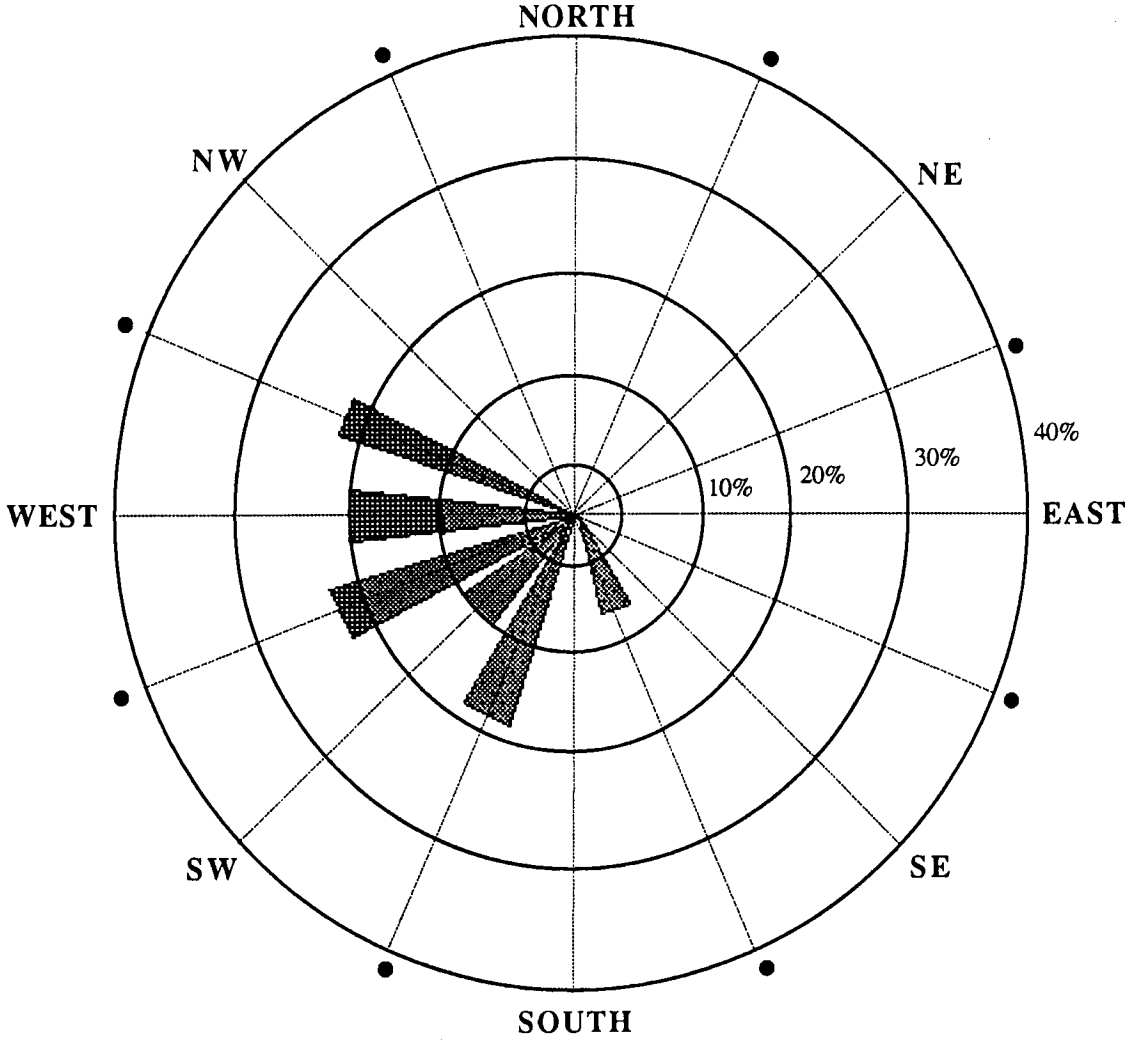
Duplicate: Relative % Difference 27

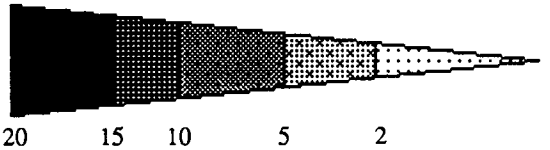
APPENDIX D

WIND SPEED AND DIRECTION DATA

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

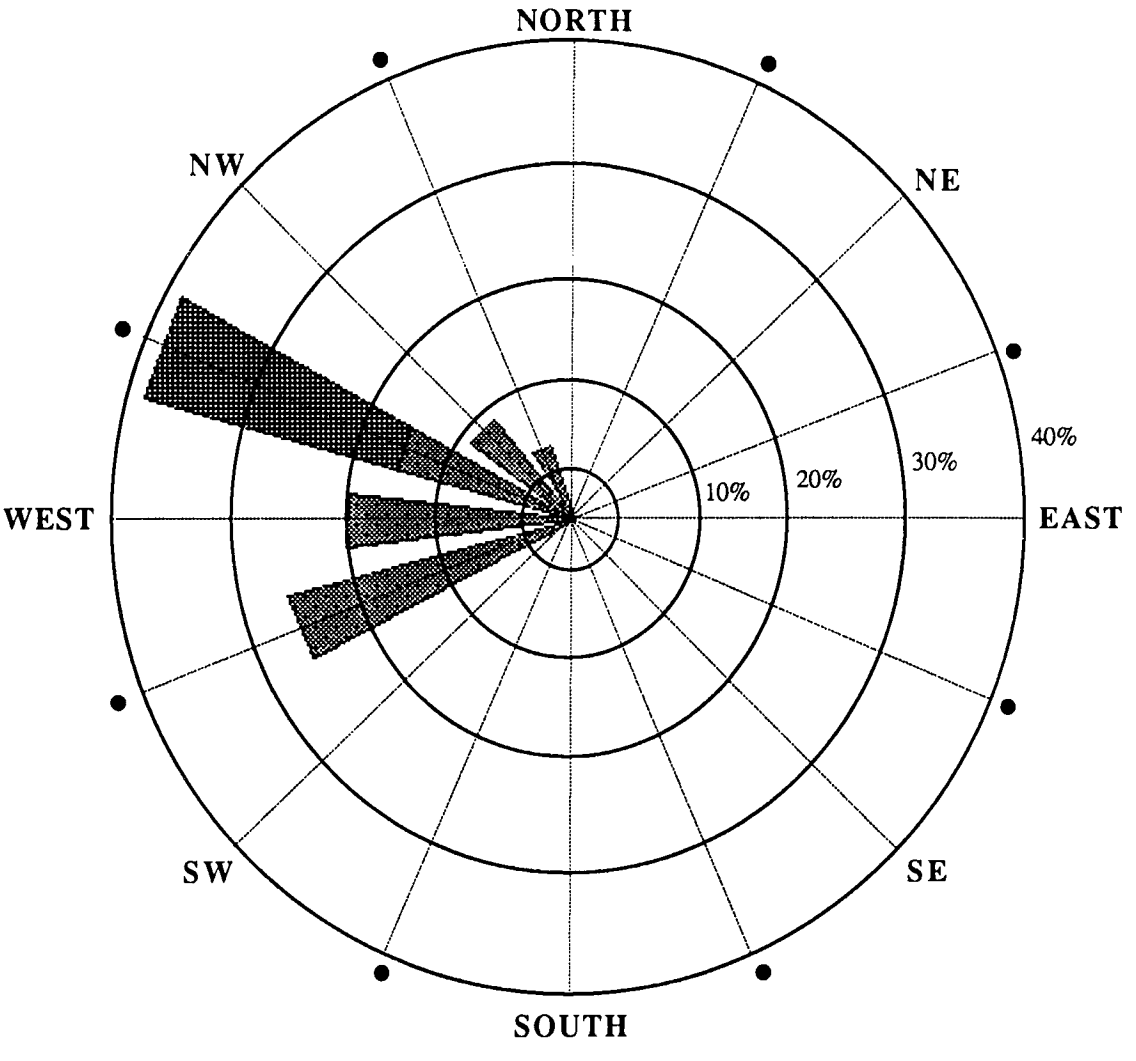
EXAMPLE - THE WIND IS BLOWING FROM THE WEST __20__ PERCENT OF THE TIME.

WINDROSE PERIOD

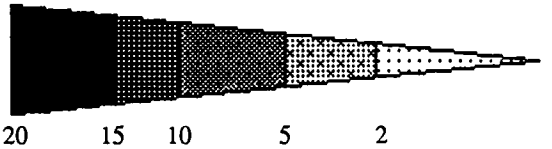
JUNE 20 thru 21, 1990
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

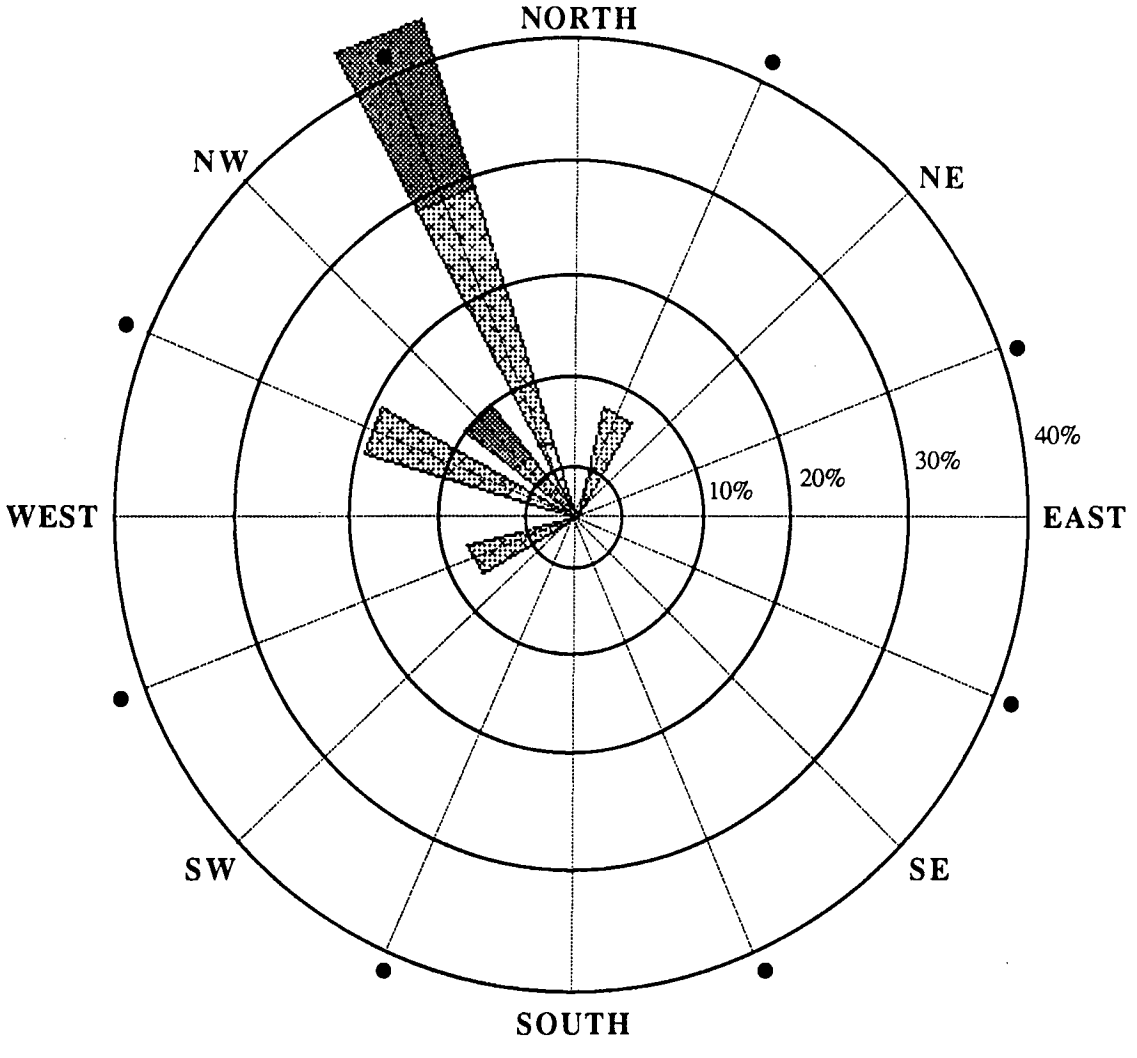
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-NORTHWEST __38__ PERCENT OF THE TIME.

WINDROSE PERIOD

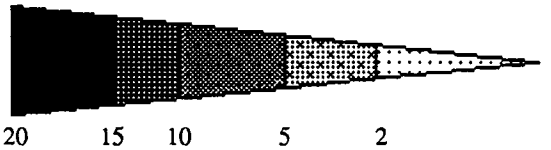
JUNE 21 thru 22, 1990
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

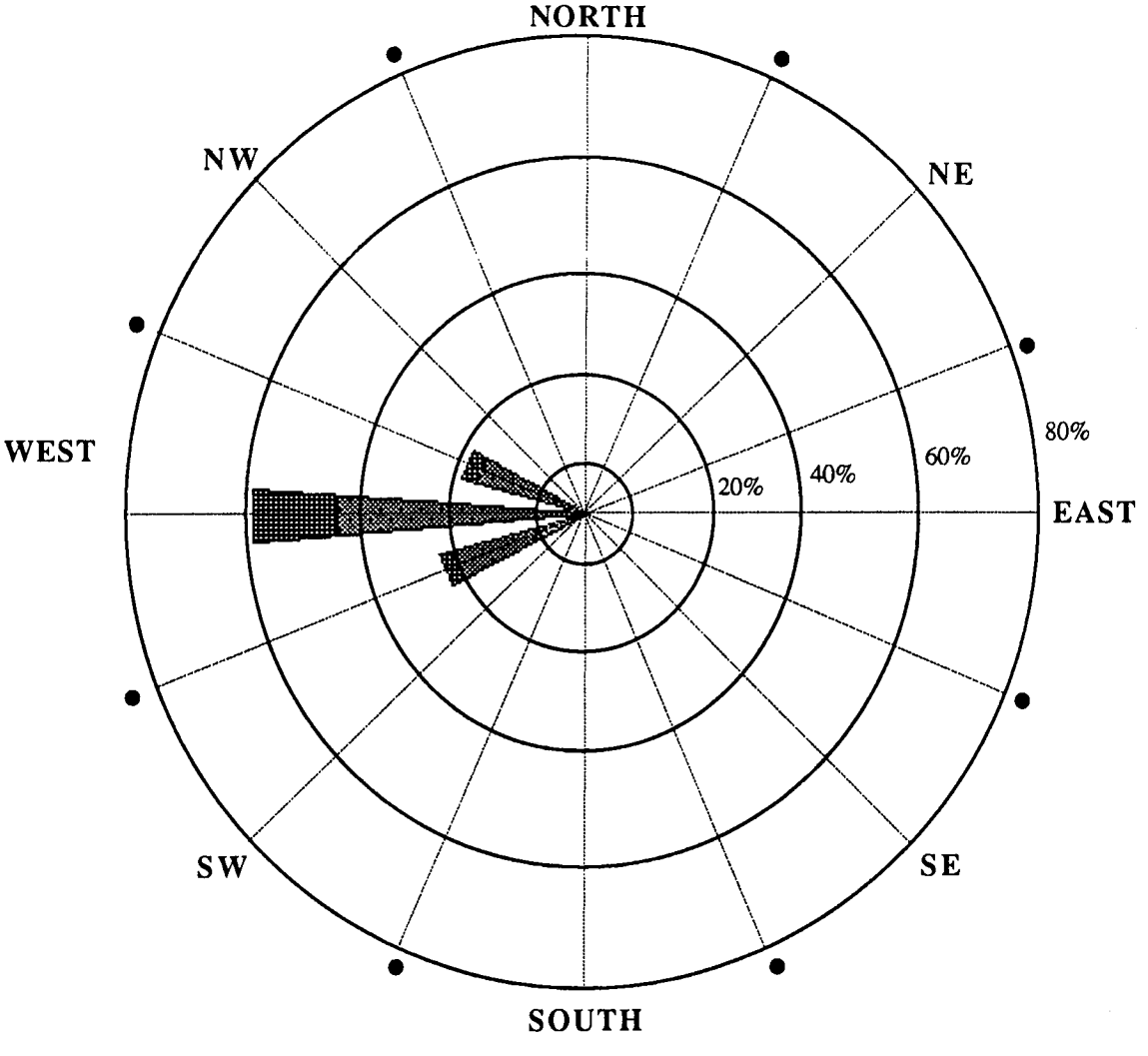
EXAMPLE - THE WIND IS BLOWING FROM THE NORTH-NORTHWEST __44__ PERCENT OF THE TIME.

WINDROSE PERIOD

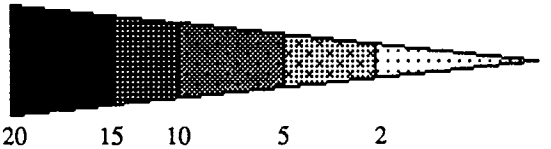
JUNE 23 thru 24, 1990
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST __59__ PERCENT OF THE TIME.

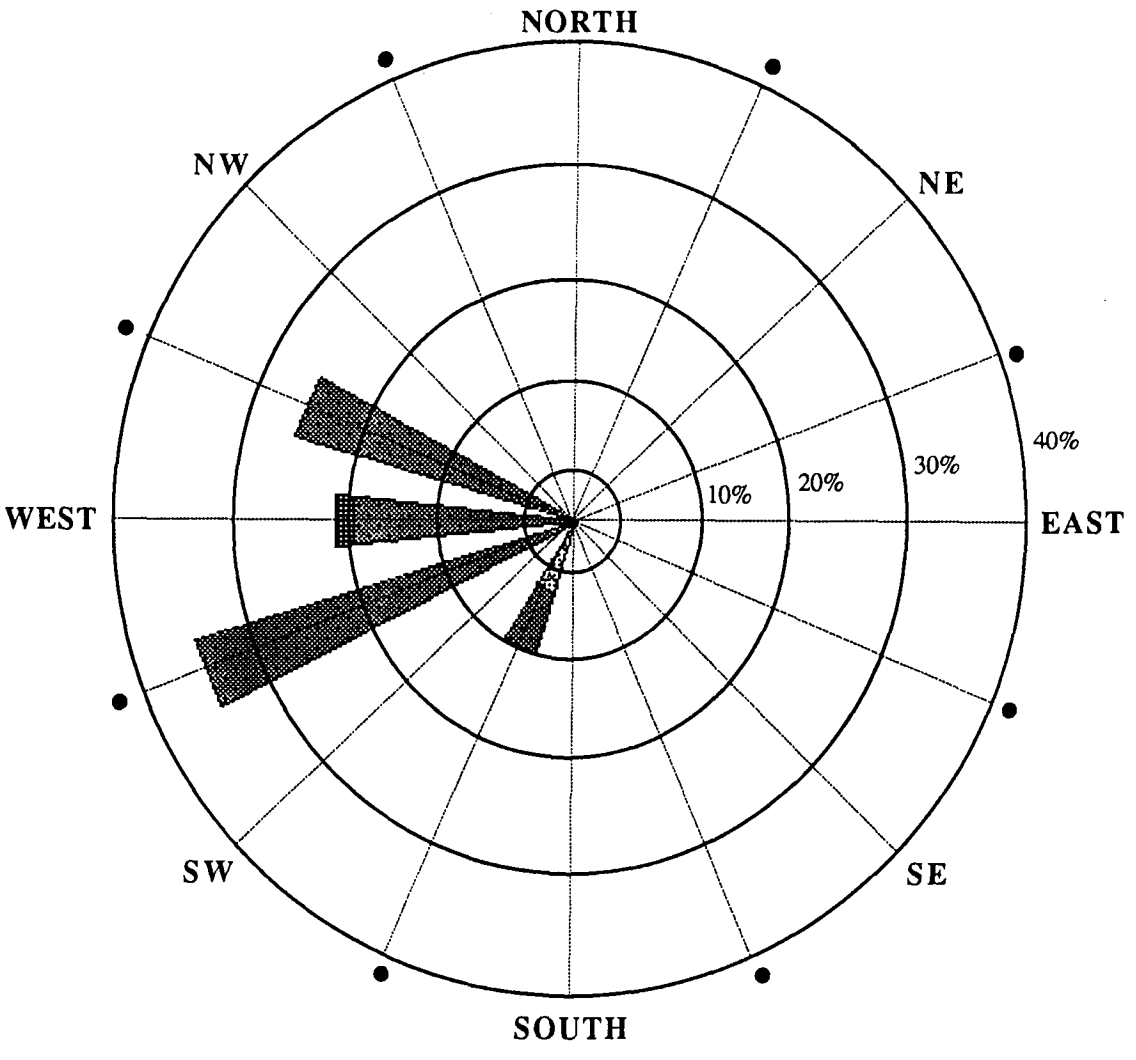
WINDROSE PERIOD

JUNE 24 thru 25, 1990

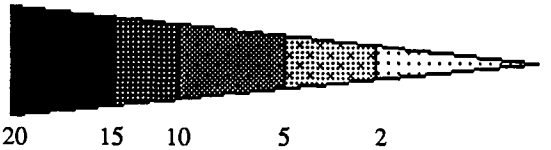
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __35__ PERCENT OF THE TIME.

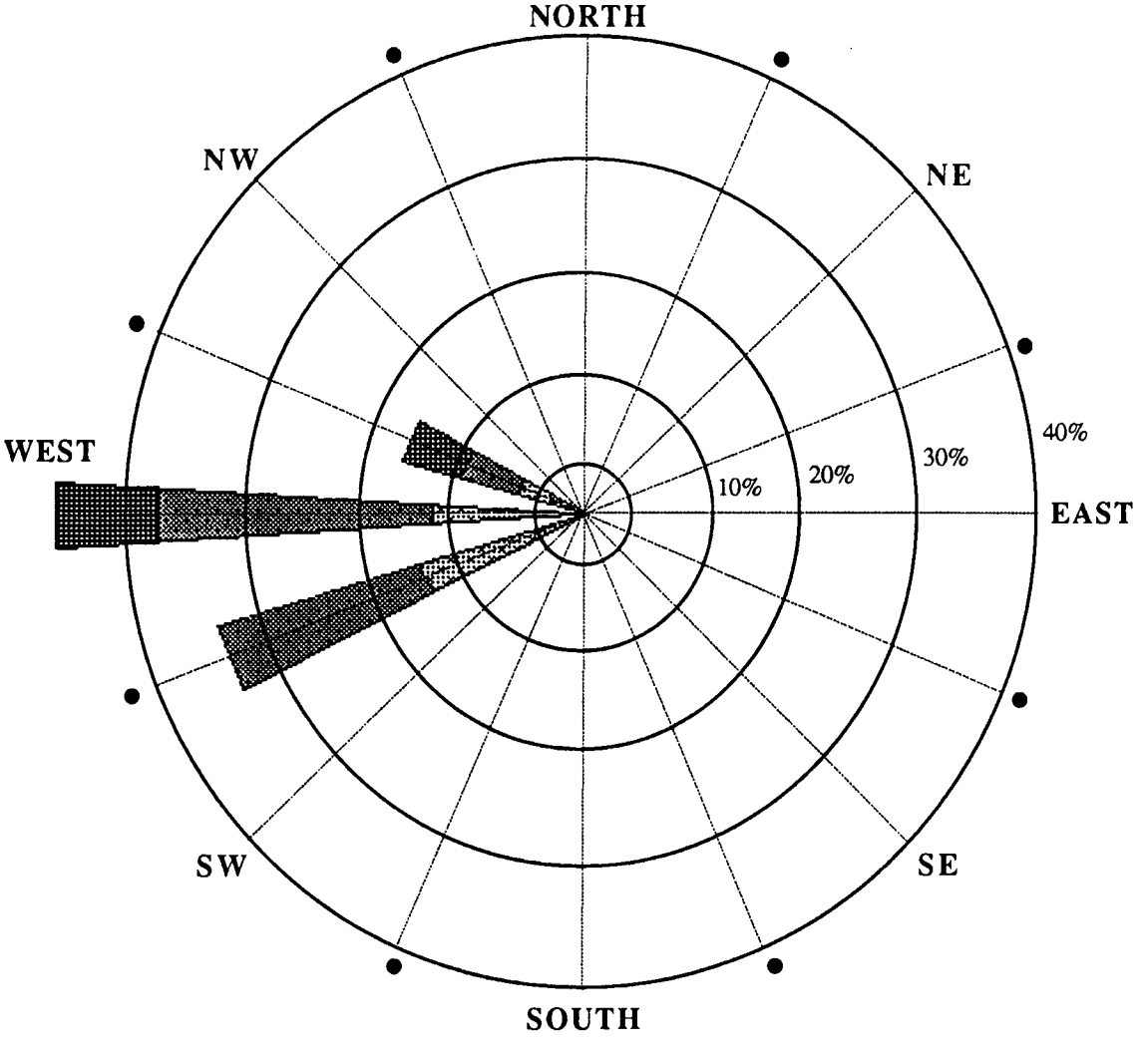
WINDROSE PERIOD

JUNE 25 thru 26, 1990

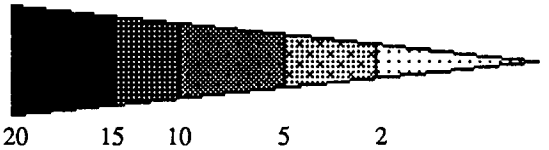
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST __46__ PERCENT OF THE TIME.

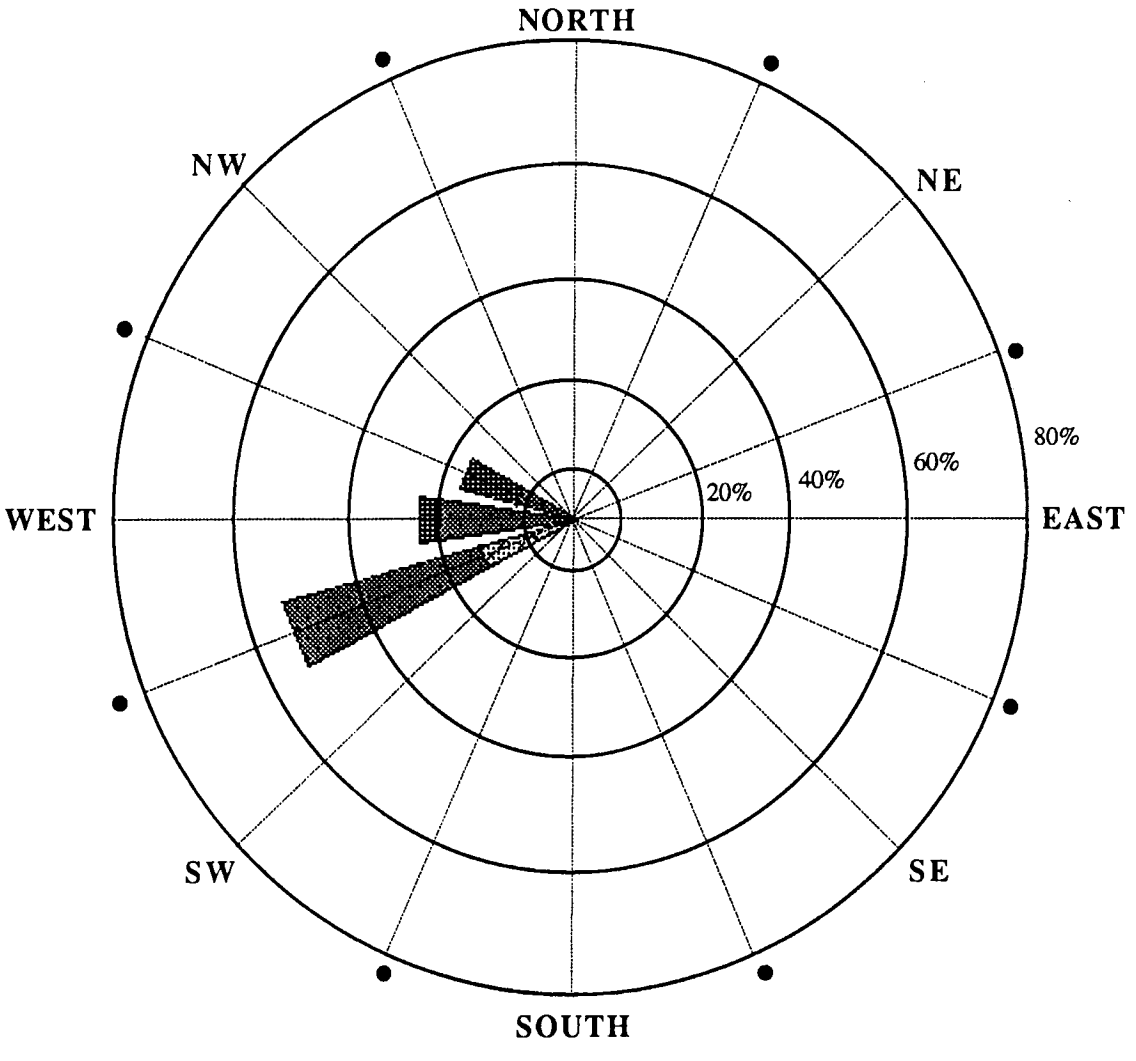
WINDROSE PERIOD

JUNE 26 thru 27, 1990

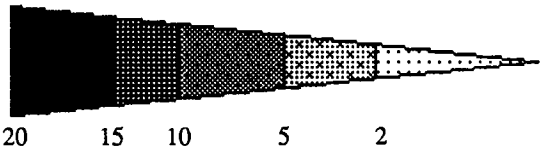
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __56__ PERCENT OF THE TIME.

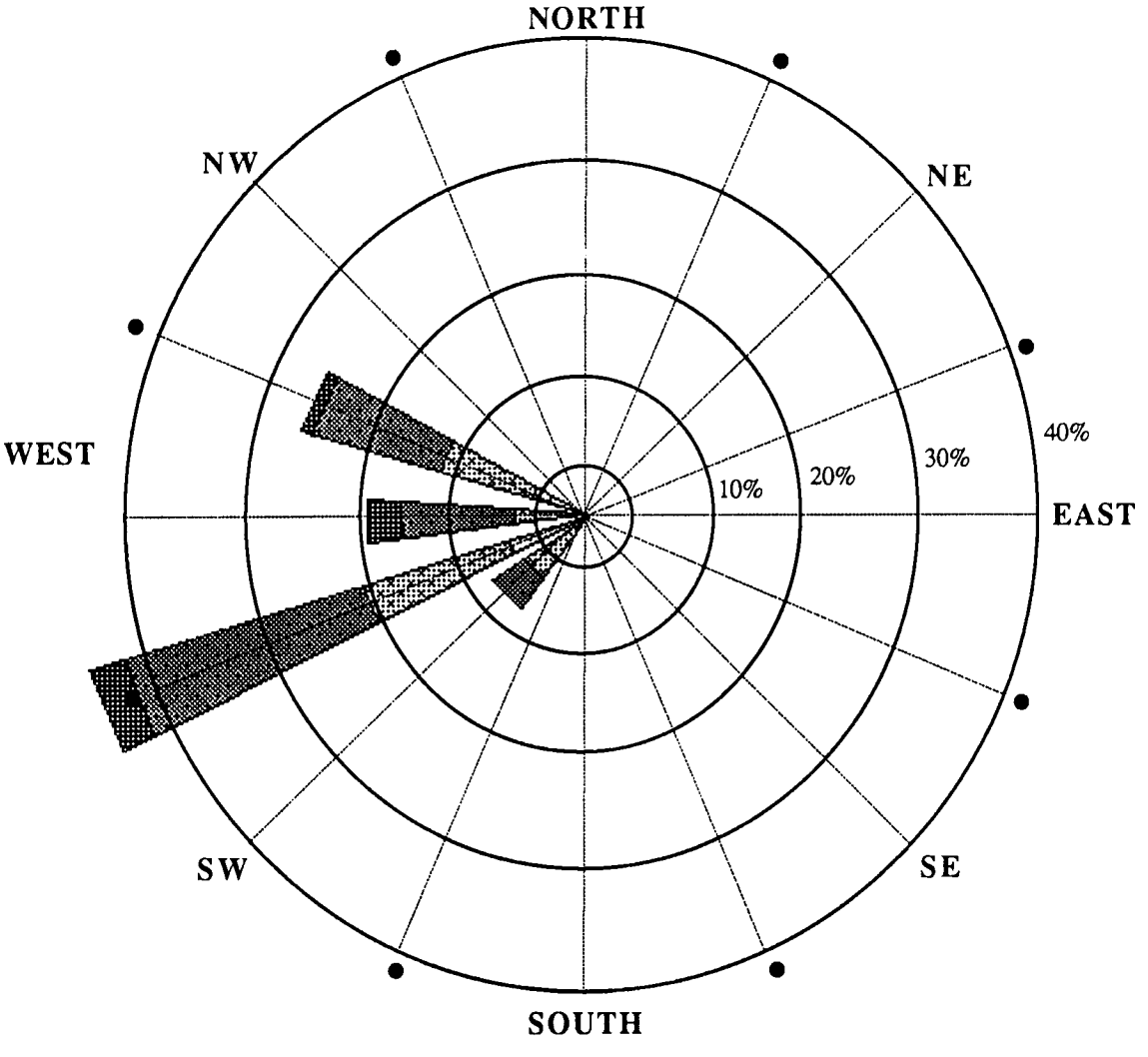
WINDROSE PERIOD

JUNE 29 thru 30, 1990

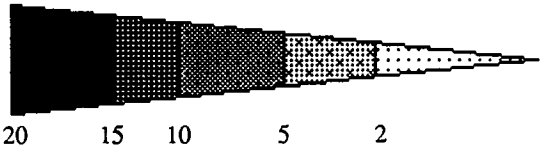
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __43__ PERCENT OF THE TIME.

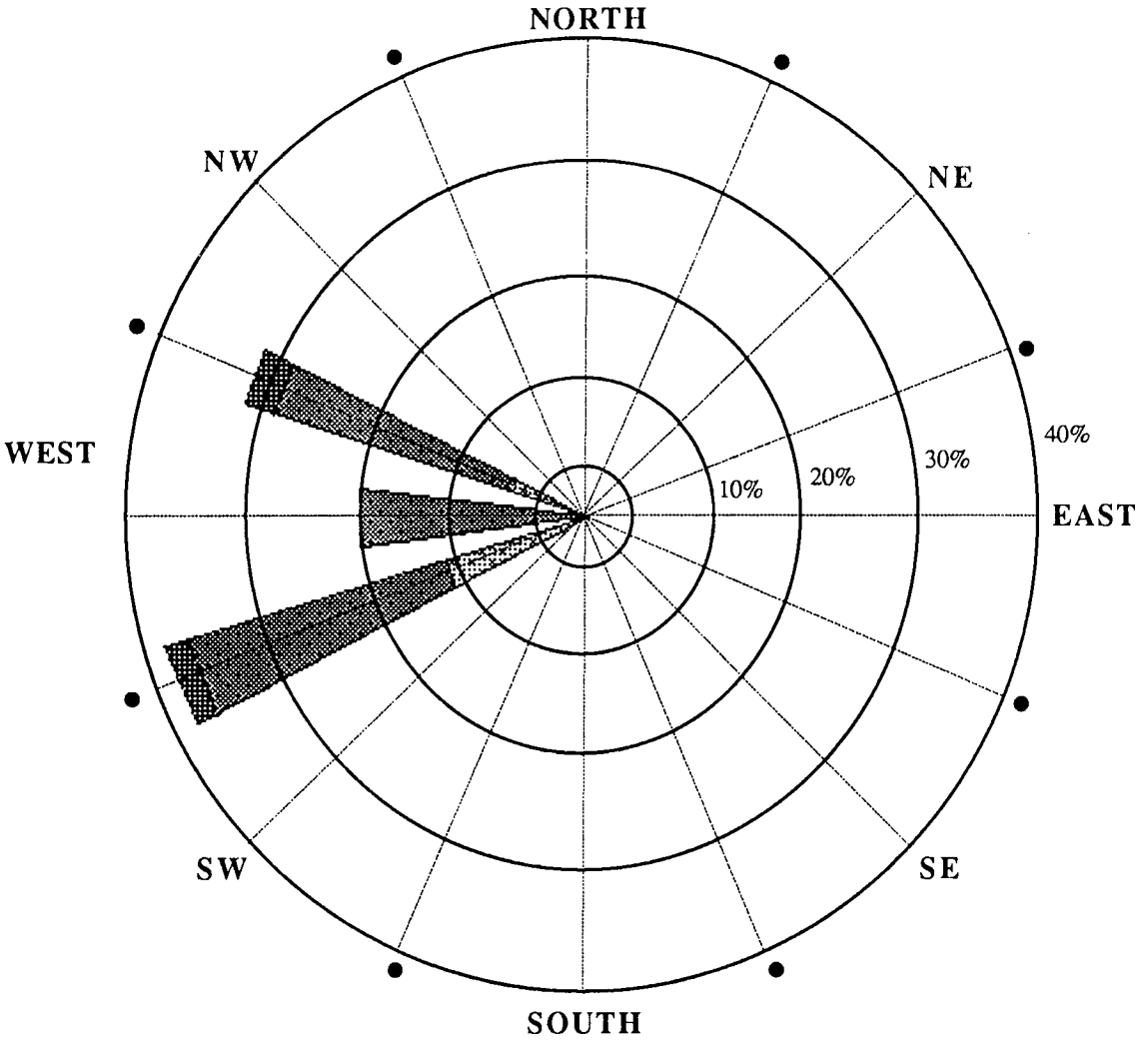
WINDROSE PERIOD

JUNE 30 thru JULY 1, 1990

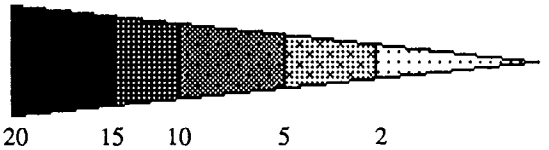
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __38__ PERCENT OF THE TIME.

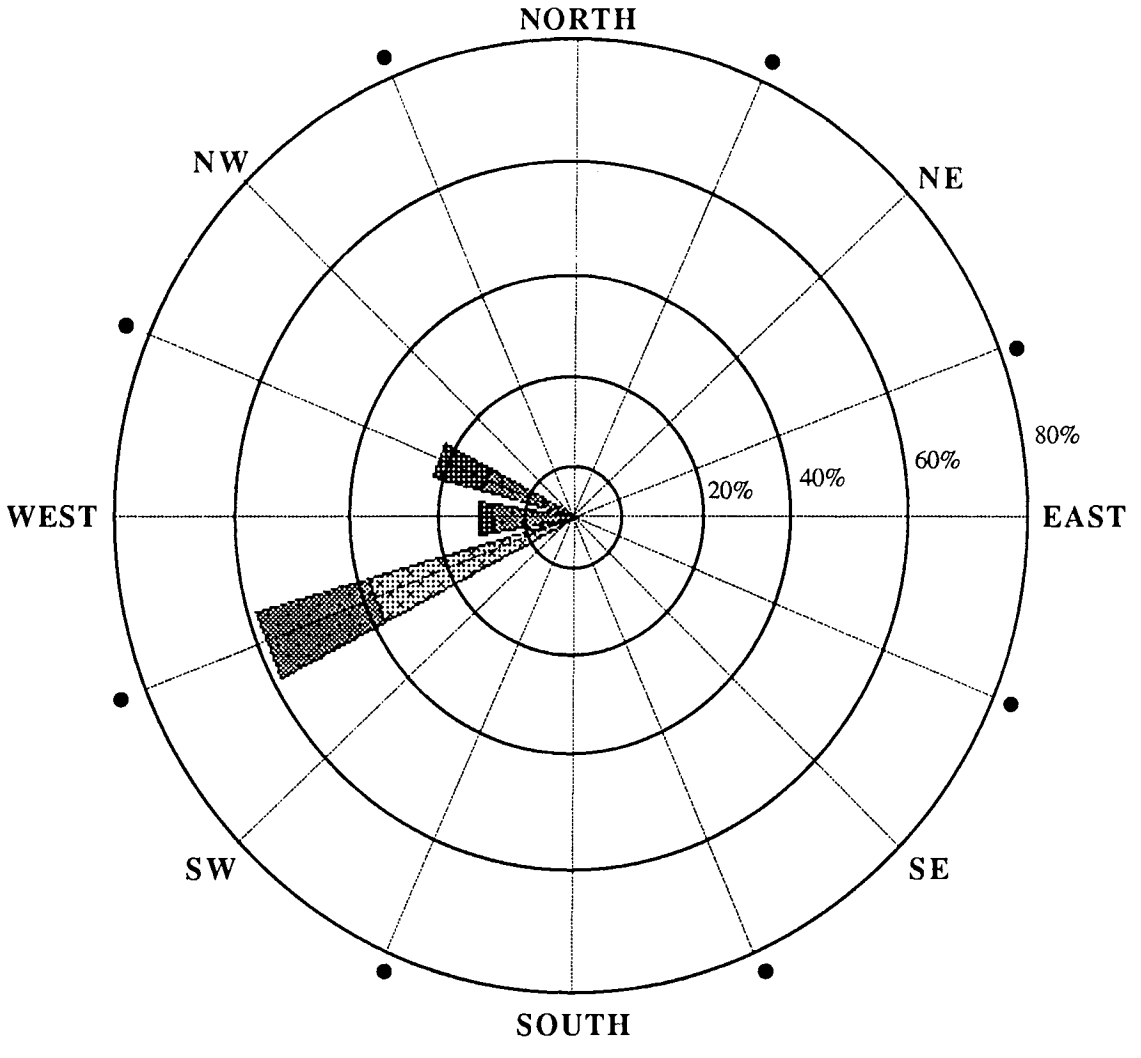
WINDROSE PERIOD

JULY 1 thru JULY 2, 1990

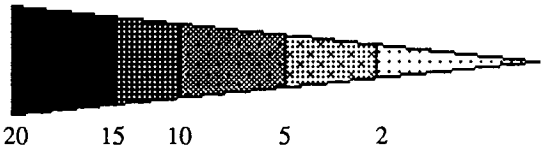
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __59__ PERCENT OF THE TIME.

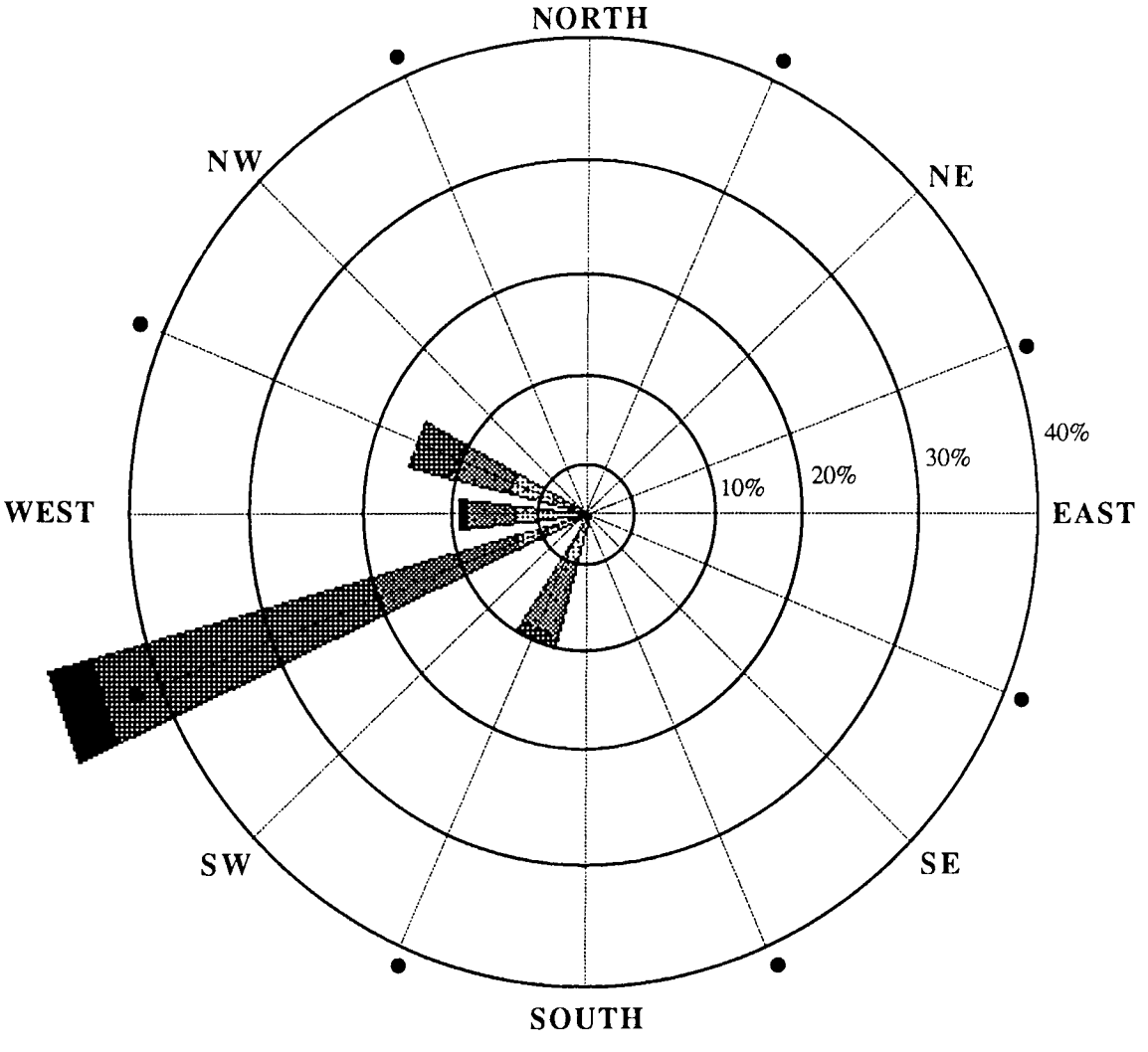
WINDROSE PERIOD

JULY 2 thru 3, 1990

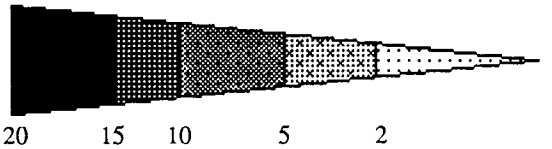
Downwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

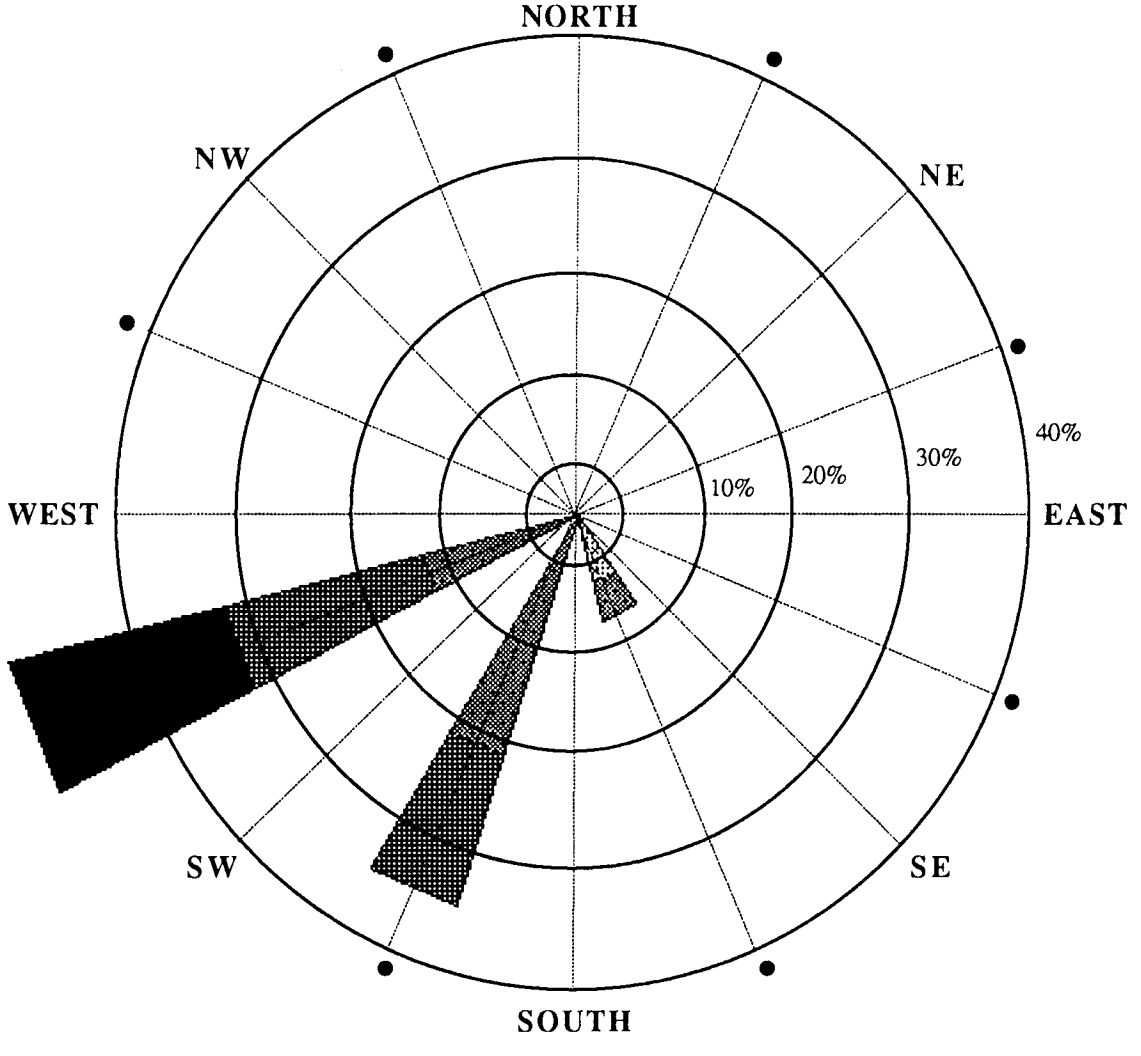
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __48__ PERCENT OF THE TIME.

WINDROSE PERIOD

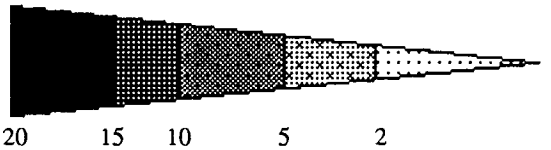
10-Day Summary
Downwind Air Samplers

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

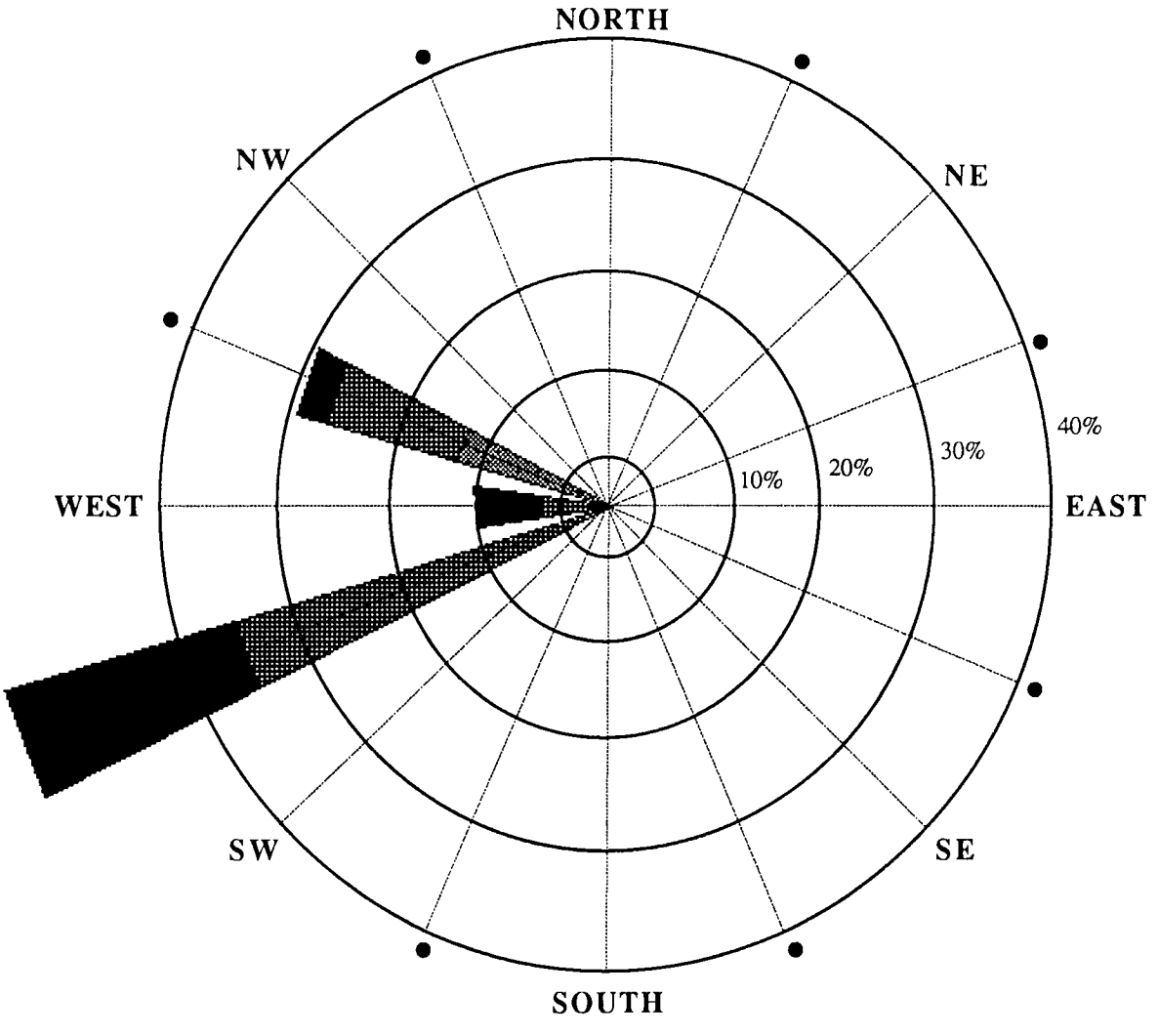
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __53__ PERCENT OF THE TIME.

WINDROSE PERIOD

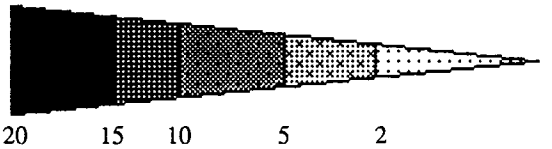
JUNE 20 thru 21, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

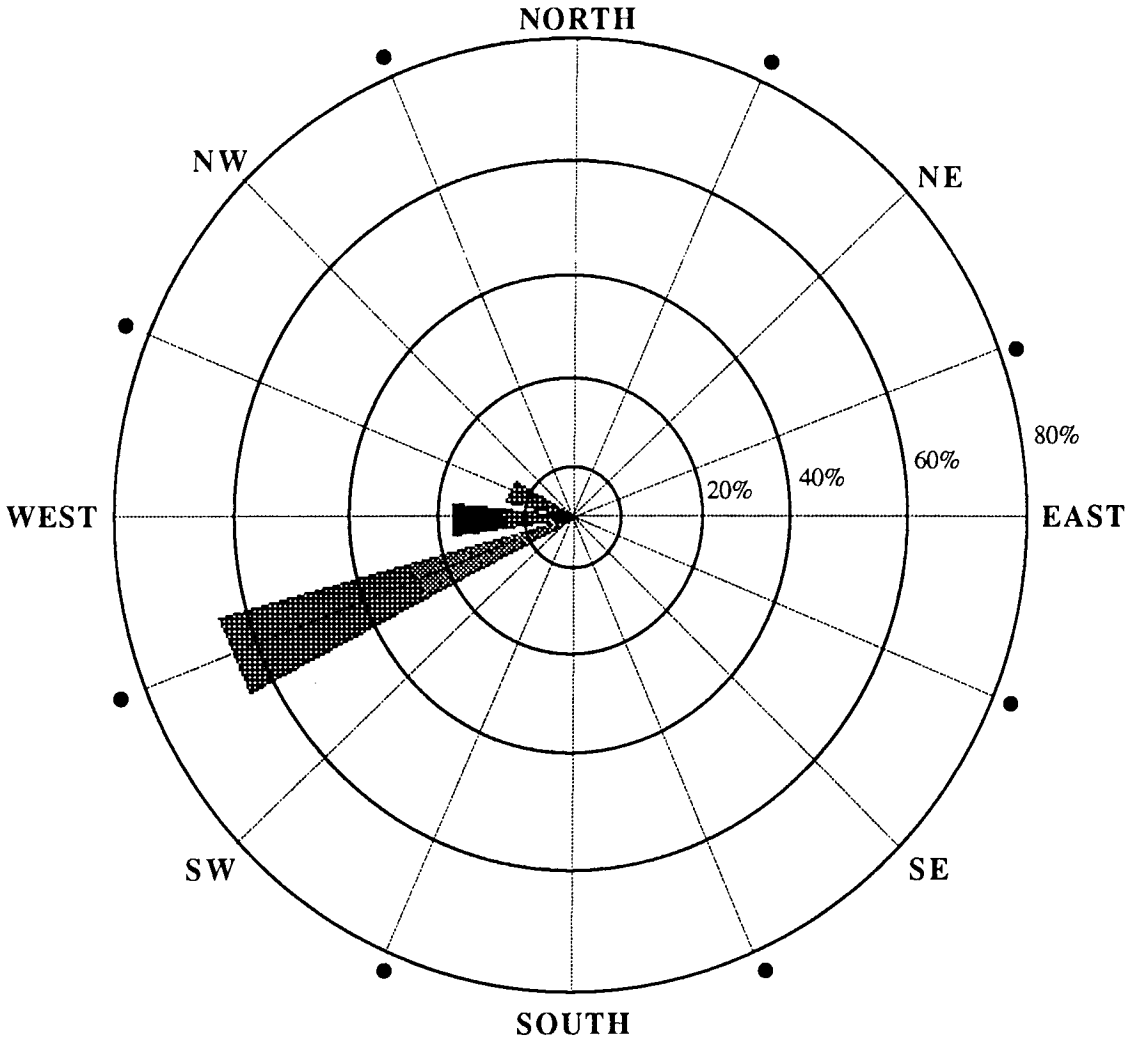
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __55__ PERCENT OF THE TIME.

WINDROSE PERIOD

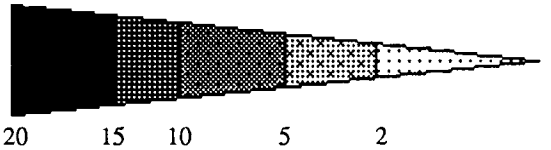
JUNE 21 thru 22, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

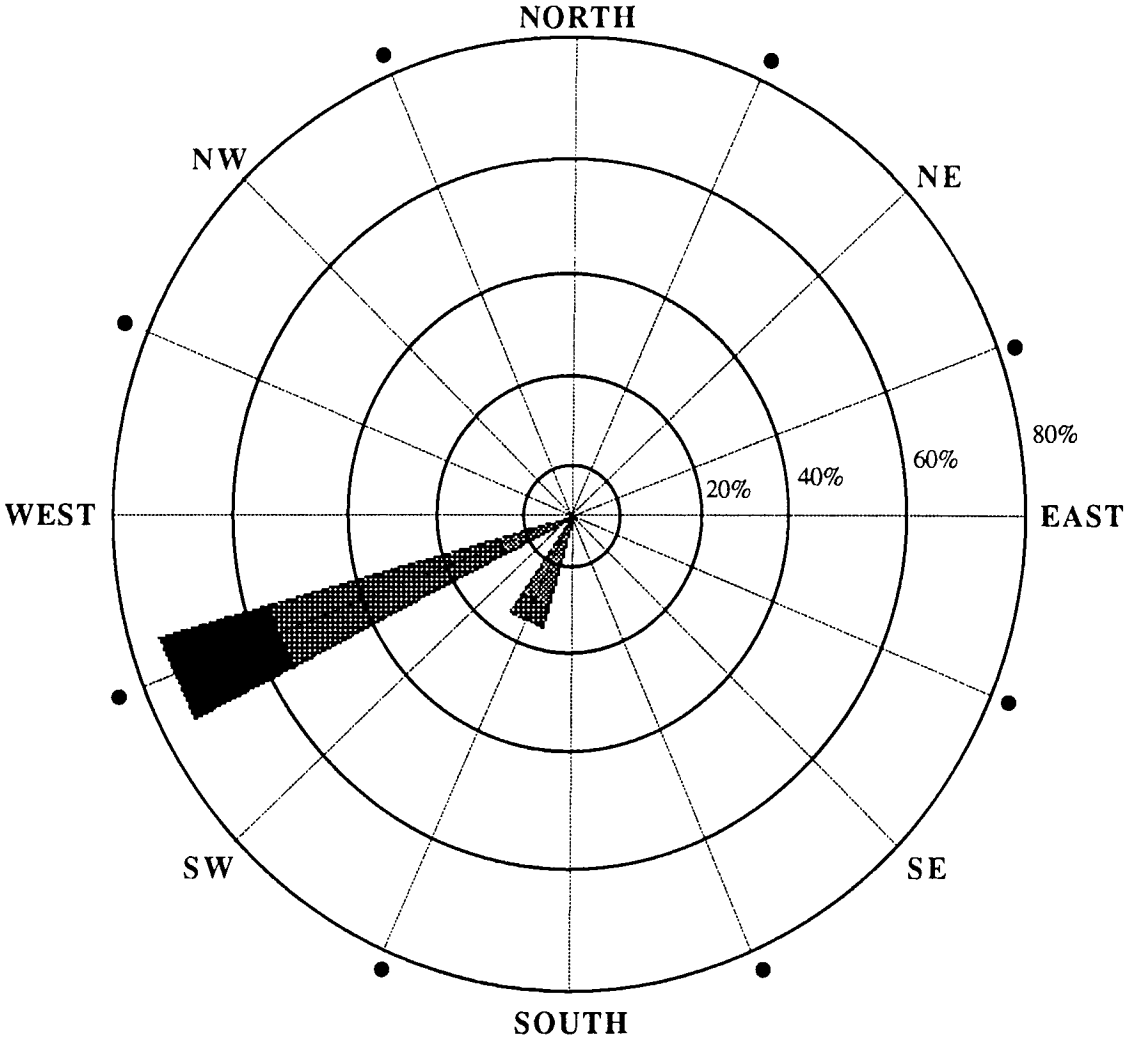
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __64__ PERCENT OF THE TIME.

WINDROSE PERIOD

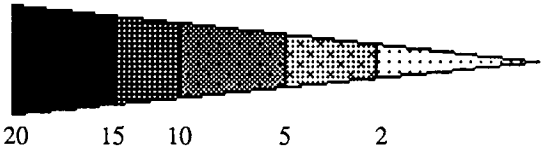
JUNE 23 thru 24, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

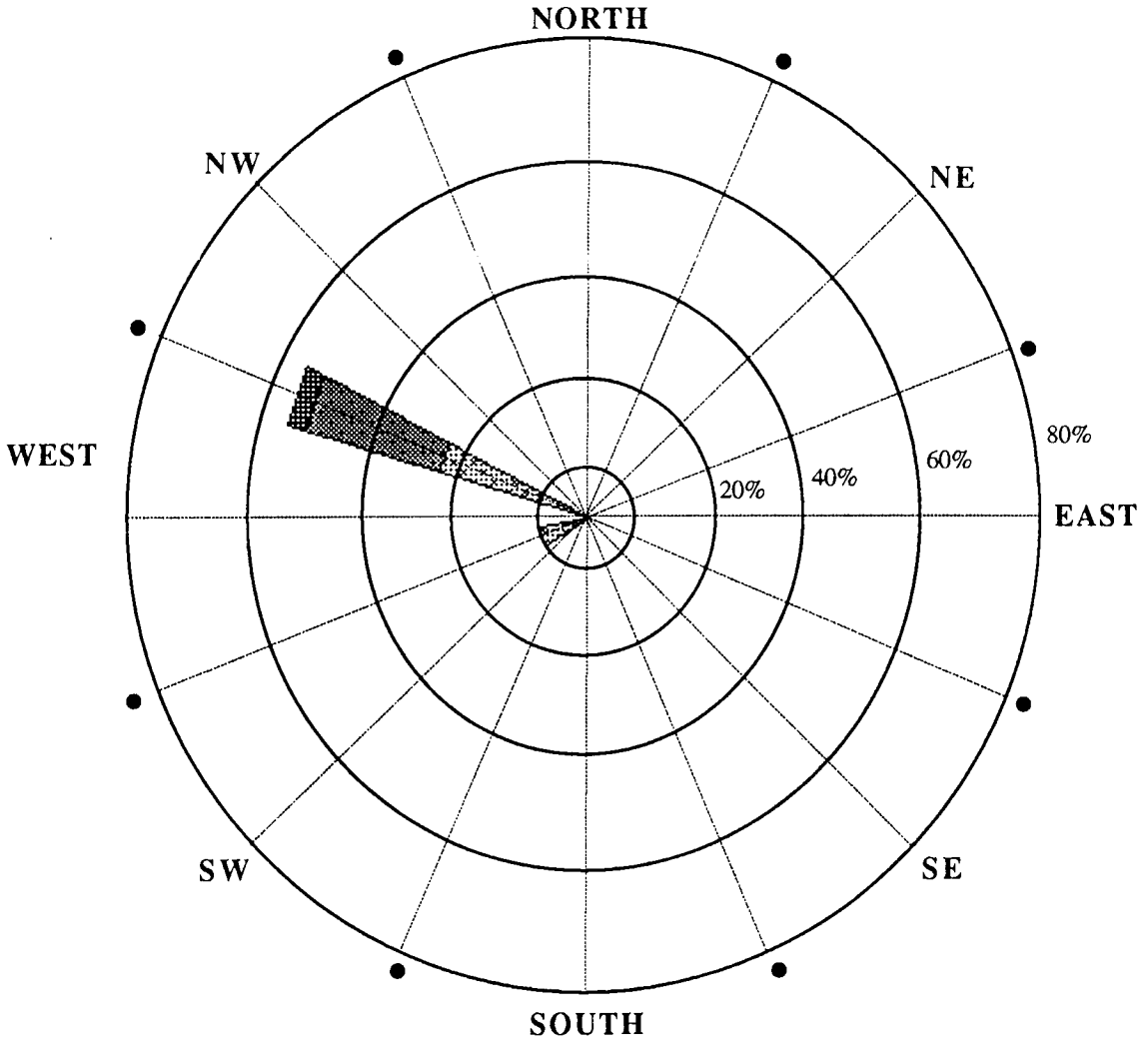
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __75__ PERCENT OF THE TIME.

WINDROSE PERIOD

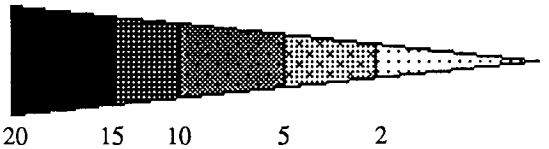
JUNE 24 thru 25, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-NORTHWEST __55__ PERCENT OF THE TIME.

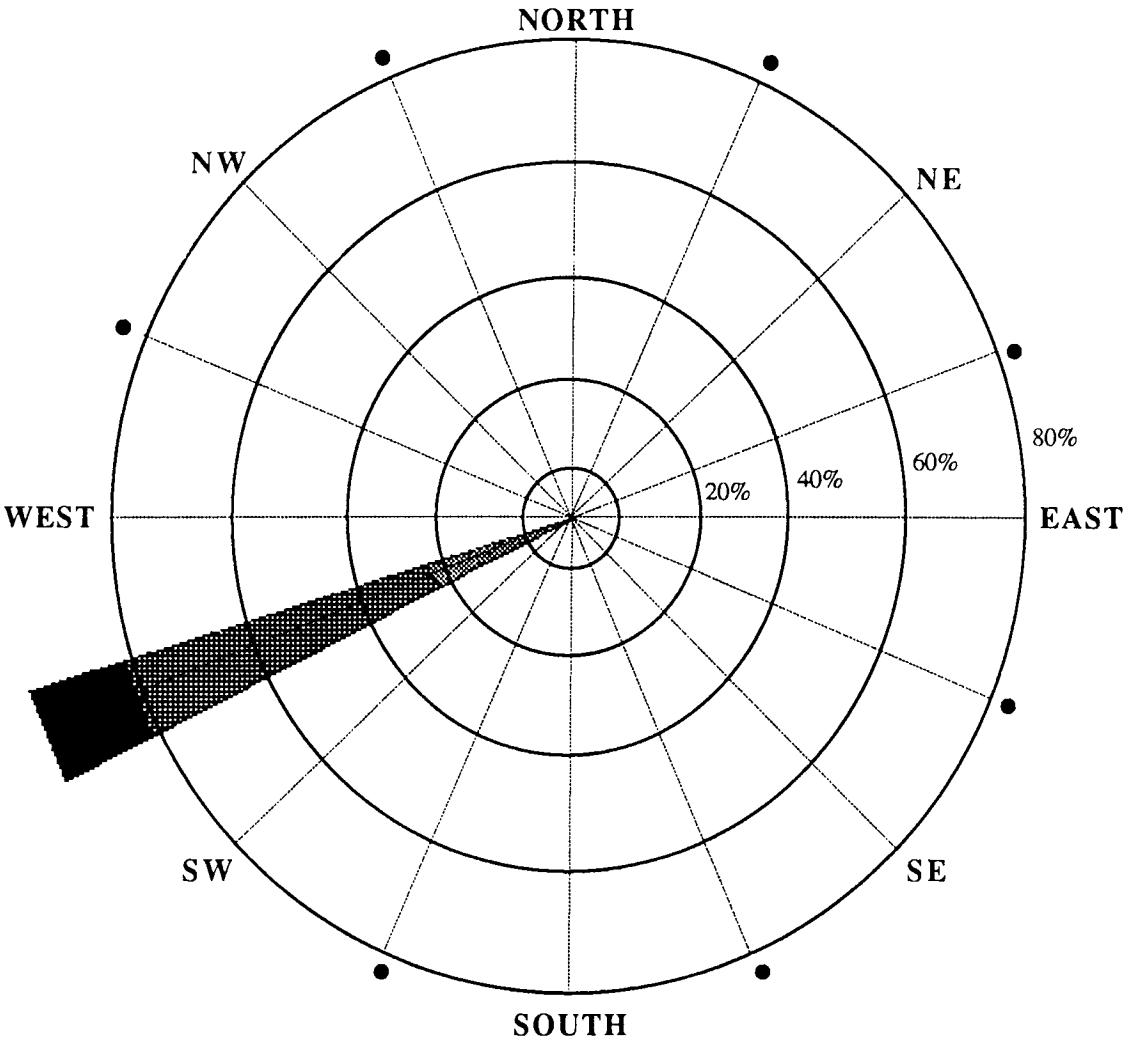
WINDROSE PERIOD

JUNE 25 thru 26, 1990

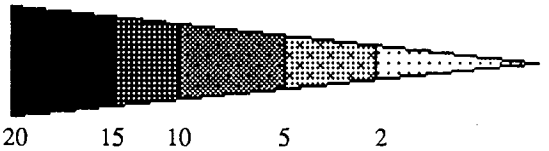
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

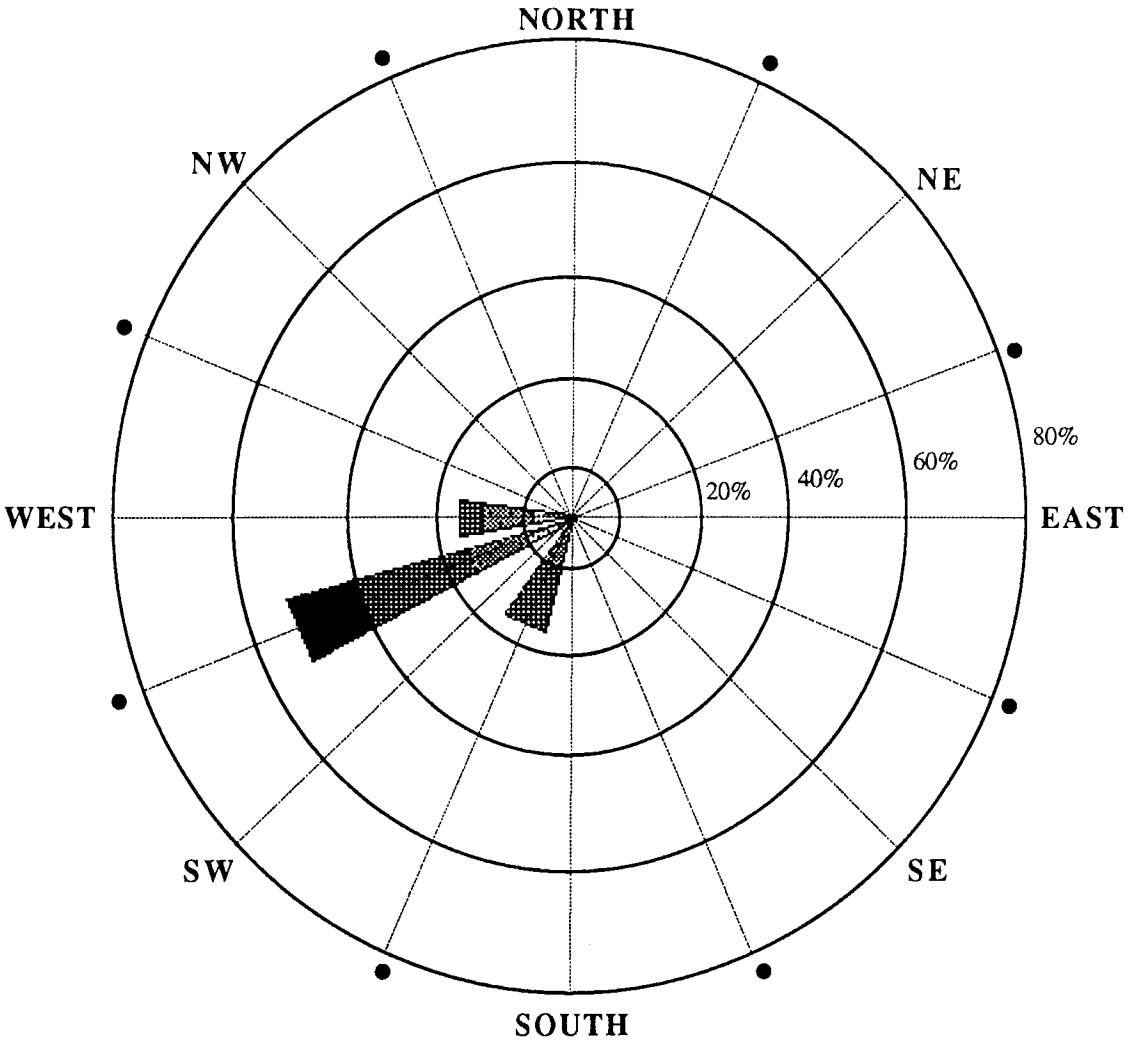
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __89__ PERCENT OF THE TIME.

WINDROSE PERIOD

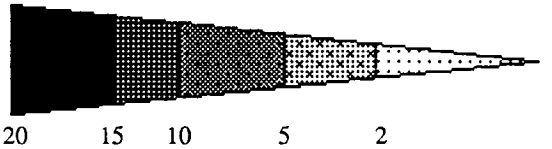
JUNE 26 thru 27, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

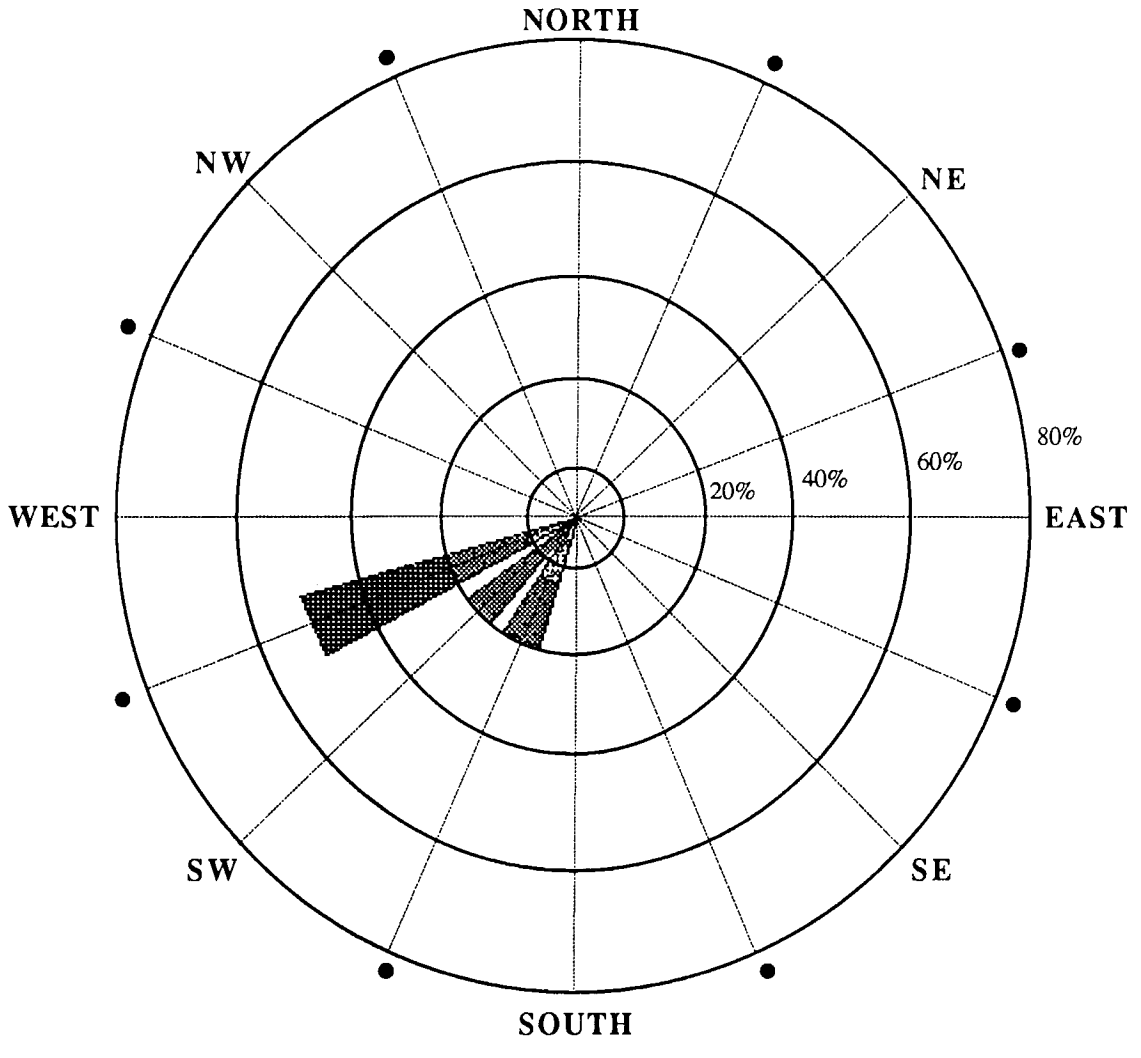
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __51__ PERCENT OF THE TIME.

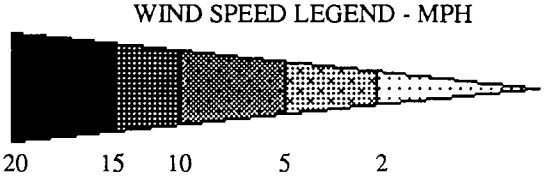
WINDROSE PERIOD

JUNE 29 thru 30, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE





NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

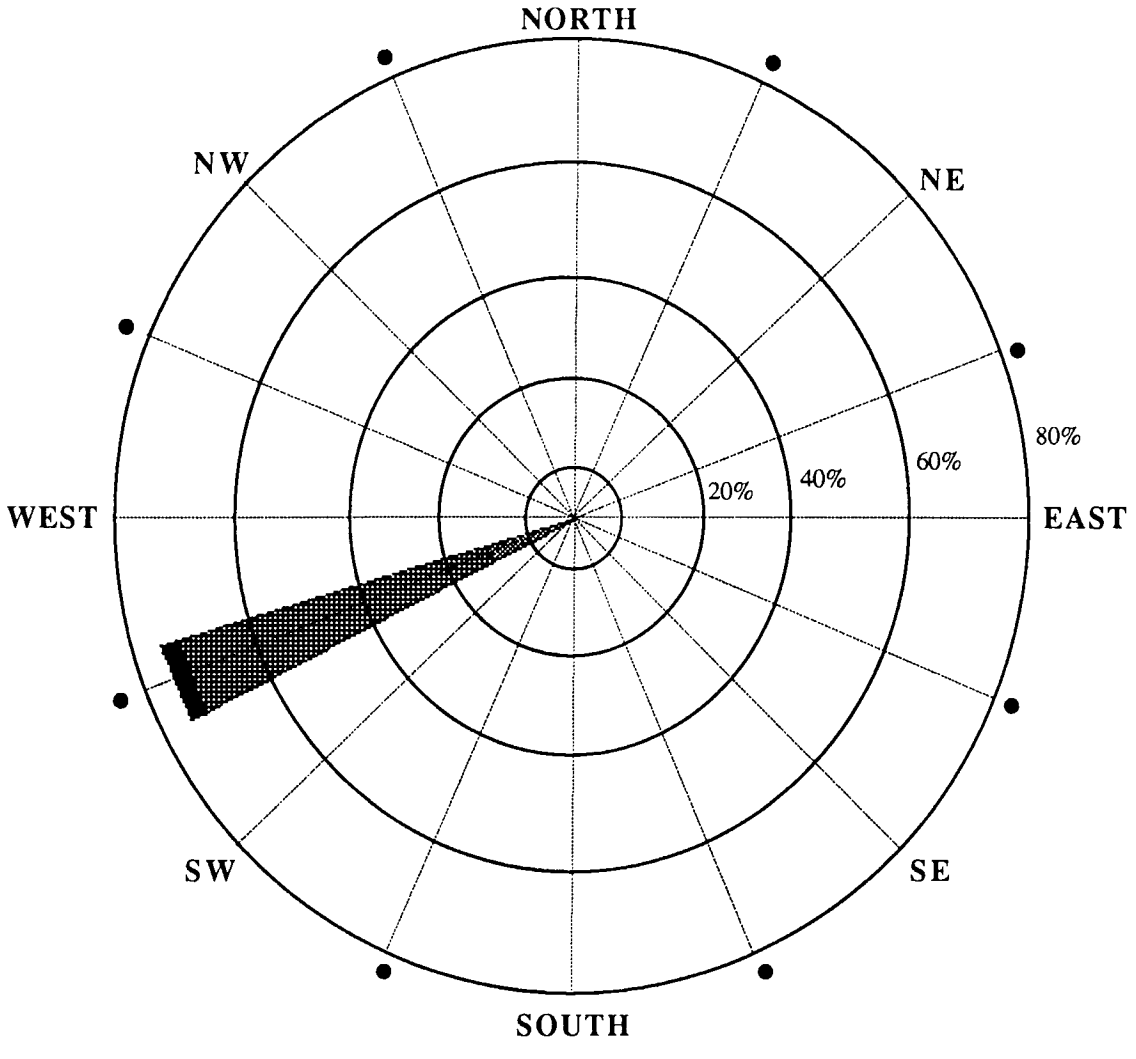
EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __52__ PERCENT OF THE TIME.

WINDROSE PERIOD

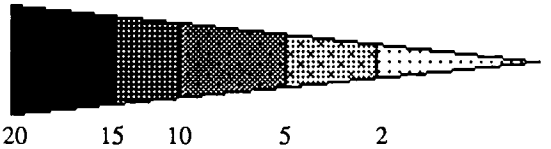
JUNE 30 thru JULY 1, 1990
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __72__ PERCENT OF THE TIME.

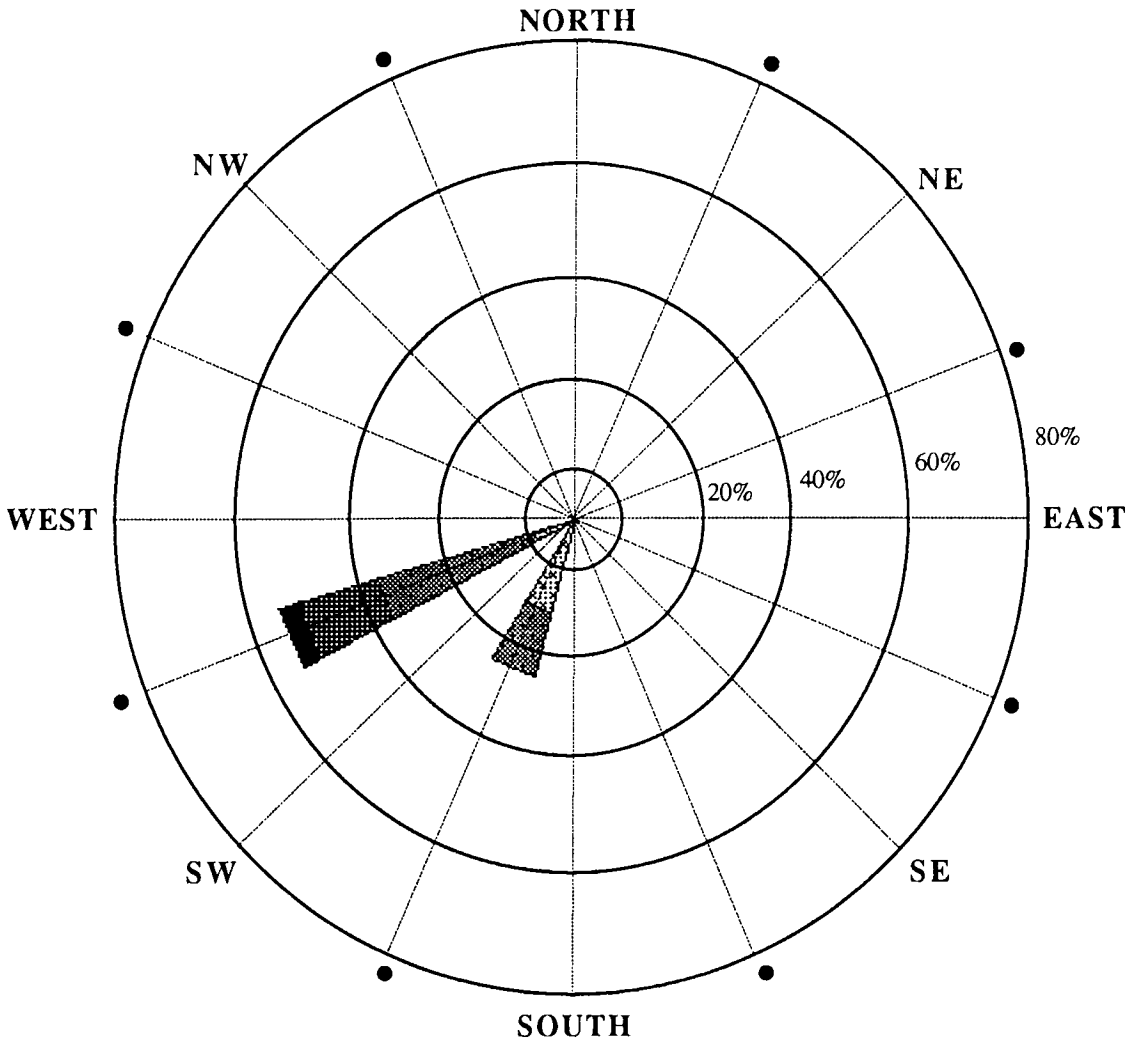
WINDROSE PERIOD

JULY 1 thru 2, 1990

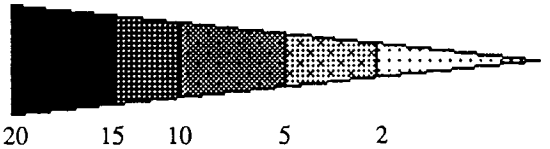
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __54__ PERCENT OF THE TIME.

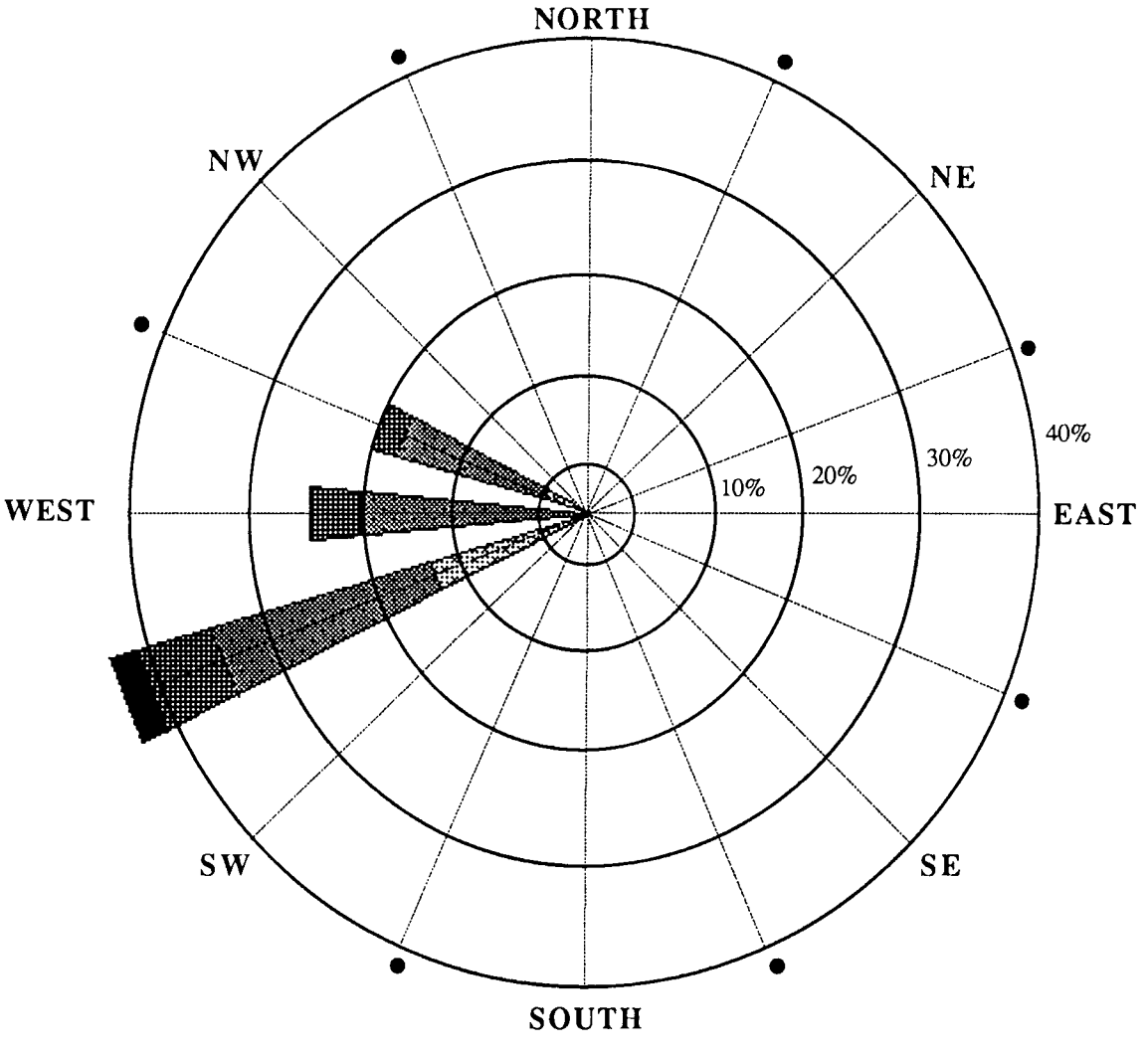
WINDROSE PERIOD

JULY 2 thru 3, 1990

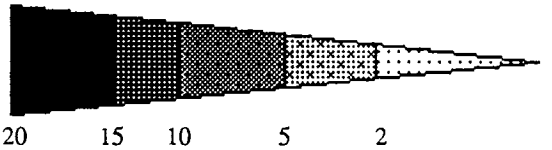
Upwind Air Sampler

SCS ENGINEERS

WINDROSE



WIND SPEED LEGEND - MPH



NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

EXAMPLE - THE WIND IS BLOWING FROM THE WEST-SOUTHWEST __43__ PERCENT OF THE TIME.

WINDROSE PERIOD

10-Day Summary
Upwind Air Samplers

SCS ENGINEERS

APPENDIX E

LANDFILL GAS MIGRATION MONITORING FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORTS

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 100968-6
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: PP1-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	ND	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	79	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	0.4	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 100968-2
CLIENT: SCS ENGINEERS
JOB #: 0388042
SAMPLE ID: PP2-3

DATE RECEIVED: 07/03/90
DATE ANALYZED: 07/04/90
DATE REPORTED: 07/16/90

Report on Analysis of Gas Samples for Gross Constituents & Trace Organics

CALDERON "IN SITU" DISPOSAL SITE TESTING (CH&S Code 41805.5)
METHOD REFERENCE: ARB Method ADDL002, Rev. 3.1, (Modified)

COMPOUND	Results nl/L (ppb)	REPORTING LIMIT nl/L (ppb)
Chloroethene (Vinyl Chloride)	ND	500
Dichloromethane (Methylene chloride)	ND	60
Trichloromethane (Chloroform)	4.9	2
1,1,1-Trichloroethane (Methylchloroform)	ND	10
Tetrachloromethane (Carbon tetrachloride)	ND	5
1,2-Dichloroethane (Ethylene Dichloride)	ND	20
Trichloroethylene	ND	10
Tetrachloroethene (Perchloroethylene)	ND	10
1,2-Dibromoethane (EDB)	ND	1
Benzene	ND	500

GROSS GAS CONSTITUENTS	RESULTS (%)	REPORTING LIMIT (%)
Oxygen	21	0.2
Nitrogen	78	0.2
Carbon Monoxide	ND	0.2
Methane	ND	0.2
Carbon Dioxide	0.6	0.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	Gross Analysis	Trace Analysis
Duplicate: Relative % Difference	3	<1